# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DIVISION OF PUBLIC UTILITIES AND CARRIERS 89 JEFFERSON BOULEVARD WARWICK, RHODE ISLAND 02888

Docket No. D-00-C-7

IN RE: Petition of CoxCom, Inc., d/b/a Cox :

Communications for Approval of I-Net

Arrangements or, in the Alternative, for a :

Waiver of a Portion of Section 7.3(a) of the :

Rules Governing Community Antenna

Television Systems

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# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DIVISION OF PUBLIC UTILITIES AND CARRIERS 89 JEFFERSON BOULEVARD WARWICK, RHODE ISLAND 02888

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# REPORT AND ORDER

# I. INTRODUCTION

On November 15, 2000, CoxCom, Inc., ("Cox" or the "Company"), filed a petition with the Rhode Island Division of Public Utilities and Carriers ("Division") seeking approval of its existing Institutional/Industrial Network ("I-Net") arrangements, or in the alternative, a waiver of a portion of Section 7.3(a) of the Division's *Rules Governing Community Antenna Television Systems* ("Rules"). Cox filed its petition pursuant to Section 1.12 of the aforementioned Rules and Section 13 of the Division's *Rules of Practice and Procedure*.

In its petition, Cox states that the advanced broadband platform that makes up its Full Service Network ("FSN") furnishes an alternative technological means to provide the I-Net video functionality required under Section 7.3 of the Rules. While Cox recognizes that Rule 7.3 requires a physically separate I-Net cable (also referred to as a "B-cable"), it contends that its FSN platform actually

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allows for better I-Net service without the separate cable.<sup>1</sup> Accordingly, Cox seeks approval and confirmation from the Division that its existing I-Net arrangements comply with Section 7.3 or, in the alternative, grant its waiver request.<sup>2</sup>

In response to Cox's petition, the Division published a "Notice of Intervention Deadline" in the Providence Journal on December 14, 2000. The notice provided a summary of the instant petition and an announcement that motions to intervene could be filed with the Division through December 26, 2000.

The Division received three motions to intervene in this Docket. The motions were filed by Full Channel TV, Inc. ("Full Channel") on December 14, 2000;<sup>3</sup> the New England Cable Television Association, Inc. ("NECTA") on December 21, 2000; and the Rhode Island Department of Attorney General ("Attorney General") on December 26, 2000. Cox did not object to the motions. The three motions were subsequently granted in accordance with Rule 17(e) of the Division's *Rules of Practice and Procedure*.

The Division's Advocacy Section, an indispensable party, also entered an appearance in this docket.

The Division subsequently conducted a prehearing conference with the parties on January 3, 2001, for the purpose of establishing a procedural

<sup>&</sup>lt;sup>1</sup> Cox Exh. 3, p. 2.

<sup>&</sup>lt;sup>2</sup> <u>Id.</u>, pp. 2-3.

<sup>&</sup>lt;sup>3</sup> Full Channel is currently licensed by the Division to provide Community Antenna Television Systems ("CATV") services in Rhode Island's CATV Service Area 5. Service Area 5 comprises the communities of Bristol, Warren and Barrington.

schedule. Predicated on that schedule, the Division initially conducted duly noticed public hearings on June 27 and 28, 2001.<sup>4</sup>

## II. RULE 7.3 REQUIREMENTS

The I-Net requirements for Community Antenna Television Systems ("CATV" or "cable television companies") operating in Rhode Island are contained in Rule 7.3. To facilitate a better understanding of the record evidence and findings discussed in this Report and Order, Rule 7.3 has been reproduced below in its entirety:

# Section 7.3 Institutional/Industrial Network

- (a) All CATV systems shall provide, by means of a cable network physically separate from and fully capable of interconnection at the head end with the residential subscriber network, an institutional/ industrial network as described below. The trunk and distribution system of each such institutional/ industrial network shall be constructed at the certificate holder's expense. A standard installation for both the residential and institutional/industrial networks shall be provided to each institution designated for inclusion in that network at the certificate holder's expense.
- (b) Each institutional/industrial network shall be erected where necessary within the service area, and shall be so designed and constructed as to provide service to at least the following:
  - (1) The institutions, public buildings, and non-profit agency buildings in that service area specified for inclusion in the statewide interconnection network as designated by the Administrator in consultation with the Cable Television Advisory Council;

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<sup>&</sup>lt;sup>4</sup> A Notice of Hearing was published in the Providence Journal on June 14, 2001. In addition to these initially scheduled hearings, the Division conducted three subsequent hearings in this docket, <u>infra</u>.

(2) all police and fire stations and municipal buildings, all public and private hospitals, all public libraries, private public, parochial and universities, and colleges, all religious institutions maintaining facilities within the service area, and such other significant community institutions as the Administrator may designate in consultation with the Service Area Citizen's Advisory Committee for that service area. (Any named institution in the above listing shall have the right to decline the offer of drops to either or both networks by so stating in writing to the Administrator and the committee for that service area.)

# (c) Downstream:

The institutional/industrial network shall at a minimum be technically capable of providing the equivalent of twenty-one (21) downstream television channels on frequencies above one hundred sixty-eight megahertz (168 MHz) to all institutional/industrial network users.

# (d) Upstream:

The institutional/industrial network shall at a minimum be technically capable of providing the equivalent of twelve (12) upstream television channels on frequencies between five and one hundred eight megahertz (5 and 108 MHz), from all institutional/industrial network users.

(NOTE: Alternate technological means of providing the channel capacities required by (b) and (c) herein which will yield a comparable result may be used, subject to the approval of the Administrator.)

(e) Within one (1) year after the receipt of a Certificate of Authority to Operate, the holder thereof shall provide sufficient activated upstream and downstream channel capacity for, and make service available to, designated institutions within the initial phase(s) of residential subscriber network construction required to be completed by that time (see Section 8.2(h)). Thereafter, at a minimum channel capacity and service shall be provided and made available to

designated institutions in concurrence with the construction timetable for the residential subscriber network set forth in Section 8.2 of these rules. Early completion of institutional/industrial network construction and provision of service is encouraged.

(f) For the purpose of this section, "to make service available" shall mean to pass designated institutions and buildings with energized institutional/industrial and residential subscriber network cables so that those institutions may be connected to the cables.

# III. SUMMARY OF COX'S PETITION

In its petition, Cox states that it is fully committed to making I-Net functionality available to the public, educational and non-profit entities eligible under Section 7.3 (b) of the Rules. Cox further states that it believes that it has complied with the "B-cable" requirement of Section 7.3 through the provision of B-cable functionality over both its legacy networks as well as over it advanced broadband infrastructure.<sup>5</sup> Cox also maintains that the B-cable functionality that it provides was understood by Cox to be in compliance with the Rules based on its reliance on language in Section 7.3 (d) of the Rules, which provides that "alternative technological means" of providing I-Net channel capacities may be approved by the Division if they yield a comparable result. Cox also pointed to a number of previously issued Division orders in which Cox was found to be in compliance with the Division's Rules.<sup>6</sup>

As an alternative request, Cox's petition states that if the Division believes that a waiver of a portion of Section 7.3 (a) may be necessary in order for I-Net

<sup>&</sup>lt;sup>5</sup> Cox Exh. 3, p. 3.

<sup>&</sup>lt;sup>6</sup> <u>Id</u>., p. 4.

functionality to be made available over Cox's FSN, then Cox requests such a waiver.

Cox supports its waiver request by stating that a waiver would avoid the wasteful duplication of facilities. Cox also represents that if its waiver request is granted it will agree to provide additional non-video services that will bring highspeed data capability to eligible I-Net users. Cox contends that such additional services will benefit eligible users and serve the public interest.

In describing the additional non-video services that it plans to offer I-Net users, Cox first emphasized that there is no requirement that a CATV operator make available more than basic video services under Section 7.3 of the Rules. Cox states that under its proposal it will allow schools, municipalities and a designated quantity of State buildings passed by its network, to utilize its FSN for video and certain high-speed data services. Cox explains that these services could then be used to interconnect points within a municipal data network to facilitate data transfer and/or access other points and services in their networks such as Internet access. Under Cox's proposal, primary outlets for some highspeed data transmission services would be made available at no charge to eligible users, while other more extensive services would be made available at a discounted rate. 7 Cox also would not reduce its voluntary commitment to provide one free high-speed Internet installation to every school passed by the Company's broadband network.8

<sup>&</sup>lt;sup>7</sup> <u>Id</u>., pp. 5-6. <sup>8</sup> <u>Id</u>., p. 6.

The full details of the terms and conditions attached to Cox's proposal are contained in July 14, 2000 and October 12, 2000 letters, which were previously forwarded to the Division.<sup>9</sup> Cox included these letters with the instant petition. Because these documents provide the most detailed description of Cox's I-Net proposal available, they have been attached to this Report and Order as "Appendix 1" (July 14, 2000 letter) and "Appendix 2" (October 12, 2000 letter). Both shall be incorporated by reference.

# IV. HEARINGS AND APPEARANCES

The Division conducted five duly noticed public hearings on Cox's petition on June 27 and 28, and December 3 and 10, 2001; and December 19, 2002. The following counsel entered appearances in this docket:

For Cox: Alan D. Mandl, Esq., and

Kevin Horan, Esq.

For Full Channel: William C. Maaia, Esq., and

Michael J. Crocker, Esq.

For the Attorney General: William K. Lueker, Esq.

Special Assistant Attorney General

For NECTA: William D. Durand, Esq.

For the Division's Leo J. Wold, Esq.

Advocacy Section: Special Assistant Attorney General

Cox proffered three witnesses in support of its petition filing. The witnesses were identified as Mr. John Wolfe, Vice President of Government and Public Affairs; Mr. Alan Gardiner, Director – Network Services; and Mr. Stephen Lynch, Director – Network Development.

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<sup>&</sup>lt;sup>9</sup> Cox Exh. 3, "Exhibit 1" and "Exhibit 2", respectively.

The Division's Advocacy Section proffered two witnesses in this docket. The witnesses were identified as Mr. Patrick Mahoney, Vice President of Systems Engineering, Broadband Access Networking Group, Inc. and Mr. Domingo Kullberg, Manager of Network Engineering, Broadband Access Networking Group, Inc.

Full Channel did not present a direct case in this docket. Alternatively, the Company submitted a written position statement with respect to Cox's petition. Additionally, the Company's System Manager, Mr. Mike Davis, did offer some brief comments in both his official capacity as Full Channel's System Manager and also as a public commenter under his real name, Michael McGonagle.<sup>10</sup>

The Attorney General also opted to submit a written position statement in lieu of presenting a direct case in this docket.

NECTA's participation in this docket was limited. It elected to not present a direct case or submit a written position statement.

Including Mr. McGonagle, supra, eighteen members of the public appeared and offered comments in this docket.

#### V. **COX'S DIRECT CASE**

Cox's three witnesses jointly submitted pre-filed direct and supplemental testimony in this docket.<sup>11</sup> They also jointly sponsored a number of exhibits, offered in support of Cox's petition. 12

<sup>&</sup>lt;sup>10</sup> Mr. Davis not only offered comment on behalf of Full Channel, in his capacity as System Manager, but he also insisted on offering "public comment" under the name of Michael McGonagle. Mr. Davis explained that his real name is Michael McGonagle, but that he has used Mike Davis as a professional name for over 35 years.

<sup>&</sup>lt;sup>11</sup> Cox Exhs. 1 and 2, respectively.

<sup>&</sup>lt;sup>12</sup> Cox Exh. 1, Attachments).

Messrs. Wolfe, Gardiner and Lynch began their testimony with a description of Cox's current I-Net operations. As a prelude, they provided a brief history of Cox's construction and acquisitions of cable television systems in Rhode Island.

Cox's witnesses related that Cox was one of the original cable television providers in Rhode Island, beginning in Service Area 3 in 1981.<sup>13</sup> Cox was subsequently authorized to operate in Service Area 13 and constructed its cable system in that Service Area in 1991.<sup>14</sup> Cox later acquired the cable television assets of Times Mirror Cable Television in Service Areas 2 and 6 in 1994;<sup>15</sup> the cable television assets of Cable TV of East Providence in Service Area 4 in 1996;<sup>16</sup> the cable assets of Colony Communications in Service Area 10 in 1996;<sup>17</sup> the cable assets of TCI Cablevision of New England in Service Areas 1, 7 and 8 in 1996;<sup>18</sup> and the cable assets of MediaOne in Service Area 9 in 1999.<sup>19</sup>

Cox's witnesses testified that when Cox constructed its cable systems in Service Areas 3 and 13 the systems included a physically separate I-Net loop or

<sup>&</sup>lt;sup>13</sup> Service Area 3 was comprised of the communities of Cranston and Johnston in 1981. The towns of Scituate and Foster were added subsequently in 1987 and 2003, respectively.

<sup>&</sup>lt;sup>14</sup> Service Area 13 is comprised of the communities of Burrillville and Glocester.

<sup>&</sup>lt;sup>15</sup> Service Area 2 is comprised of the communities of Providence and North Providence. Service Area 6 is comprised of the communities of Warwick, West Warwick, East Greenwich and Coventry.

<sup>&</sup>lt;sup>16</sup> Service Area 4 is comprised of the city of East Providence.

<sup>&</sup>lt;sup>17</sup> Service Area 10 is comprised of the city of Pawtucket.

<sup>&</sup>lt;sup>18</sup> Service Area 1 is comprised of the communities of Woonsocket, Smithfield, No. Smithfield, Lincoln, Cumberland and Central Falls. Service Area 7 is comprised of the communities of Newport, Middletown, Portsmouth, Tiverton and Little Compton. Service Area 8 is comprised of the communities of Narragansett, Jamestown, N. Kingstown, S. Kingstown, Exeter and West Greenwich

<sup>&</sup>lt;sup>19</sup> Service Area 9 is comprised of the communities of Westerly, Charlestown, Hopkinton and Richmond.

B-cable capable of delivering 21 channels of downstream and 12 channels of upstream video capacity.<sup>20</sup> As for the existing cable systems acquired by Cox since 1994, Messrs. Wolfe, Gardiner and Lynch related that Cox inherited the then existing B-cable arrangements of TCI, Cable TV of East Providence, Colony Communications, Times Mirror Cable Television and MediaOne. They also explained that some of these predecessor cable companies had received waivers from the Division with respect to their I-Net obligations under the Rules, which the witnesses noted that Cox subsequently inherited.

Cox's witnesses related that while the B-cable networks within the systems acquired by Cox over the years were initially constructed as required by the Rules, the B-cable was not widely utilized in most communities (Cox Exh. 1, p. 6). Cox proffered the following information to show the limited B-cable usage in Rhode Island as of 1999:

- Newport: B-Cable has been active at City Hall, Rogers High School and Thompson Junior High. An active video link connects all Newport schools.
- *Middletown: B-Cable is active.*
- East Providence: B-Cable is active as return paths from City Hall and the High School.
- Providence: B-Cable return capacity is utilized from City Hall and the Civic Center.
- Pawtucket: B-Cable capacity is used from City Hall and McCoy Stadium.
- West Greenwich: B-Cable capacity is utilized by the town School Department.
- Woonsocket: B-Cable functions originate from City Hall, Harris Library, Woonsocket High School, Barry Field, [and] World War II Memorial Park.<sup>21</sup>

<sup>&</sup>lt;sup>20</sup> Cox Exh. 1, Attachment 1.

<sup>&</sup>lt;sup>21</sup> <u>Id.</u>, Attachment 1, Part A. 3.

Cox's witnesses testified that because of its limited use, all physically separate I-Net loops or B-cable network locations that had previously been in use were reconnected to a reconfigured fiber optic-based network. These changes were made during Cox's system upgrade, which Cox completed in 2000. Cox noted that it has invested more than \$300 million upgrading its Rhode Island cable system since 1995.<sup>22</sup> Messrs. Wolfe, Gardiner and Lynch contended that as a result of Cox's efforts to rebuild its cable infrastructure in Rhode Island, Rhode Island will be the only state in the nation to benefit from a:

... competitive, virtually statewide, fiber optics-based video and communications platform capable of providing a wide array of advanced video, data and voice services to consumers and businesses in the state".<sup>23</sup>

Messrs. Wolfe, Gardiner and Lynch testified that as a consequence of Cox's cable system upgrade, Cox has eliminated the need for a physically separate B-cable network. They assert that Cox's new 750 MHz platform provides superior "B-cable functionality" and illustrates that Cox has provided the technical capability for I-Net service in all of its service areas.<sup>24</sup>

Cox's witnesses testified that when Cox upgraded its existing and acquired networks as part of its FSN deployment, it designed spare fiber counts throughout the State. The witnesses explained that this engineering strategy was designed to accommodate growth as well as to enable the provision of B-cable

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<sup>&</sup>lt;sup>22</sup> Id., p. 6.

<sup>&</sup>lt;sup>23</sup> Id., Attachment 1, Part A. 4.

<sup>&</sup>lt;sup>24</sup> <u>Id</u>., p. 7.

applications over a single, integrated FSN.<sup>25</sup> The witnesses related that this new B-cable functionality far exceeds the capabilities of the B-cable envisioned in the Rules. To support this opinion Cox proffered several charts comparing the B-cable I-Net required under the Rules and the B-cable-type I-Net functionality now available through Cox's FSN.<sup>26</sup> The witnesses concluded that Cox's current I-Net practices fully comply with Section 7.3 of the Rules.<sup>27</sup>

Cox's witnesses also emphasized that the Division was fully aware of Cox's engineering strategy to incorporate its I-Net responsibilities into its integrated FSN. Through this knowledge, Cox's witnesses maintained that the Division has effectively already approved of Cox's use of its FSN as a means of providing I-Net services.<sup>28</sup>

To demonstrate the Division's prior knowledge, Cox's witnesses testified that when Cox was before the Division in the hearing involving the transfer of Cable TV of East Providence's cable certificates, Cox explained its plans to use its FSN to meet new demand for I-Net service.<sup>29</sup> Cox noted that several transfer hearings, involving acquisitions of different cable company systems, followed. Cox's witnesses testified that during these other proceedings Cox informed the Division that it was using its FSN to make available I-Net functionality to eligible users.

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<sup>&</sup>lt;sup>25</sup> <u>Id</u>., p. 8.

<sup>&</sup>lt;sup>26</sup> <u>Id.</u>, Exh. 6, Attachments 2-4.

<sup>&</sup>lt;sup>27</sup> Id., p. 7.

<sup>&</sup>lt;sup>28</sup> <u>Id</u>., p. 9.

<sup>&</sup>lt;sup>29</sup> Id.

Cox's witnesses observed that at no time did the Division raise any issue as to whether Cox's FSN satisfied Section 7.3 in all respects. According to these witnesses:

Cox reasonably relied upon the facts that the Full Service Network is an alternative technological means of satisfying the I-Net service requirements of Section 7.3 and that the Division approved transfers of certificates in proceedings in which the deployment of the Full Service Network in place of the B-cable architecture was fully disclosed by Cox.<sup>30</sup>

Cox's witnesses related that since the Rules required the Division to find that Cox was "willing and able [to] comply with" the Division's Rules and the laws of Rhode Island in its previous transfer dockets, Cox inferred that the Division had tacitly approved of its FSN to provide I-Net services.<sup>31</sup> Cox's witnesses opined that, in hindsight, Cox should have sought a written finding substantiating its inferences.

Cox's witnesses next discussed the Company's alternative request for a waiver. They testified that although they believe a waiver is not necessary or relevant under the circumstances, the Division should grant Cox a waiver if the Division believes that the Section 7.3(a) "physically separate network" standard precludes the use of Cox's FSN to provide I-Net functionality.<sup>32</sup> Cox's witnesses maintained that such a waiver would ironically, actually allow Cox to exceed the I-Net service requirements under the current rules.<sup>33</sup>

<sup>30</sup> <u>Id</u>., pp. 9-10.

<sup>&</sup>lt;sup>31</sup> Id., p. 10.

<sup>&</sup>lt;sup>32</sup> <u>Id</u>., p. 10.

<sup>&</sup>lt;sup>33</sup> <u>Id</u>., pp. 11-12.

Cox's witnesses next discussed the reasons why Cox believes the granting of its petition would be in the public interest. They related that if Cox were allowed to use its FSN to meet its I-Net service obligation it would be able to provide the service in a more "technically efficient and economical manner". They further related that Cox's request would serve the public interest by avoiding wasteful duplication of network facilities and extra pole and conduit attachments. They also stated that the approval of the instant proposal would allow Cox to make available all of the I-Net capabilities of the FSN to those eligible users located in Service Areas where waivers of the requirements of Section 7.3 are currently in effect.

Cox's witnesses explained that Cox's request is "especially attractive" because it is coupled with Cox's undertaking to make available, to existing and additional users, additional services that are not required under the Division's Rules. The aforementioned additional services were thereupon briefly described as follows:

Briefly, Cox's proposal would make available service capabilities in two ways. First, Cox proposes to allow schools and municipalities, as well as a designated number of state buildings passed by its network, to utilize its state-of-the-art hybrid fiber-coaxial network for video. Second, Cox would allow eligible participants to utilize its broadband network for certain high-speed data services beyond the basic video services required under the Division's Rules. These services could then be used to interconnect points within a municipal data network to facilitate data transfer

<sup>&</sup>lt;sup>34</sup> <u>Id</u>., p. 12.

 $<sup>\</sup>frac{1}{10}$ , p. 13.

<sup>&</sup>lt;sup>36</sup> Cox Exh. 2, pp. 2-3.

and/or access to other points and services in that municipal data network. The offering of these additional services would not reduce Cox's voluntary commitment to provide one free highspeed Internet installation to every school passed by the Company's broadband network. Under Cox's proposal, each municipality, as well as the State of Rhode Island, would benefit from the functionality of a data network, a regional video channel and two municipally-specific video channels (two statewide video channels in the case of the State). This functionality is in addition to the two statewide interconnect channels and public access channels currently available through Cox's residential channel line-up.<sup>37</sup>

Cox's witnesses noted that the above arrangement especially benefits State buildings, which Cox observes are currently not entitled to I-Net services under the Rules.

Cox's witnesses additionally emphasized that if Cox's petition were denied, services and rates would be adversely impacted. They explained that if the petition were denied, Cox would be required to construct a second cable line solely for the purpose of providing I-Net services. They related that this additional construction "would place upward pressure on cable rates" and divert capital from other projects that would provide benefits to cable customers.<sup>38</sup>

Cox's witnesses also offered rebuttal comments in response to statements made by Full Channel in another docket proceeding regarding Cox's instant I-Net functionality claims.<sup>39</sup> Specifically, the rebuttal comments were directed at Full Channel's suggestion that Cox's FSN is incapable of providing the same

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<sup>&</sup>lt;sup>37</sup> Id., p. 14.

<sup>&</sup>lt;sup>38</sup> Id., p. 15.

<sup>&</sup>lt;sup>39</sup> Referring to Docket No. 2000-C-5.

functionality as a separate B-cable I-Net. On this issue, Cox's witnesses addressed each of Full Channel's declared deficiency arguments.

Full Channel's criticisms of Cox's I-Net functionality service and Cox's responses thereto are summarized below:

• Cox notes that Full Channel has stated that it is not possible to inject digital television data program streams into existing "downstream" program bundles (as would be required in the absence of a dedicated B-cable) without exquisitely complex synchronization and timing procedures not available to institutional users, if at all, now or in the foreseeable future.

In response to this declaration of deficiency, Cox's witnesses testified that the limitation suggested by Full Channel does not apply to Cox's network. They explained that Cox has solved this problem by incorporating a "cherry picker" into its network. The witnesses related that a cherry picker, or demultiplexer, as it is known in the digital video industry takes two or more originally combined signals that have been multiplexed (combined) and restores them to distinct individual channels (data streams). All these digital signals are synchronized off one common Full Service Network GPS timing system (clock), thus eliminating any differences in timing from multiple clocking sources and eliminating the need for additional institutional premises synchronization equipment.<sup>40</sup>

• Cox notes that Full Channel has stated that it is not possible to "inject" analog television signals into "downstream" paths for point to point distribution in the

<sup>&</sup>lt;sup>40</sup> <u>Id</u>., p. 16.

absence of dedicated "blank" (unmodulated) blocks of spectrum reserved for that purpose.

In response to this declaration of deficiency, Cox's witnesses testified that Cox has reserved bandwidth for such analog distribution. For point-to-point distribution, Messrs. Wolfe, Gardiner and Lynch explained that Cox would use digital encoding technology to effectuate its proposal.<sup>41</sup>

Cox notes that Full Channel has stated that the "upstream" (reverse) capacity of the coaxial plant is limited to less than 50 megahertz and of that spectrum the data carriers for Internet access, telephony, set top box communications and system monitoring occupy such a substantial portion that use of the "sublow" return path for point-to-point analog television will not be possible.

In response to this declaration of deficiency, Cox's witnesses distinguished Cox's FSN from Full Channel's older network architecture. They related that with Cox's remote hubsite facility design and common RF (radio frequency) combining architecture, RF signals have the capability to either remain node, town, area, region or state specific or can be broadcast to one or all simultaneously.<sup>42</sup>

Cox notes that Full Channel has stated that no representation of "equivalency" is made from the requirement that the forward and reverse transmissions on the I-Net system be available for throughput on the access channels designated for the Service Area.

<sup>&</sup>lt;sup>41</sup> <u>Id</u>., pp. 16-17. <sup>42</sup> <u>Id</u>., p. 18.

In response to this declaration of deficiency, Cox's witnesses proclaimed Full Channel's assertion to be "unclear" and inapplicable to Cox's FSN deployment.43

Cox notes that Full Channel has stated that no representation is made for "equivalency" to the requirement that dedicated access channels are available independently for simultaneous local programming unique to each Service Area. Cox notes that Full Channel also claims that Cox has proposed only one set of access channels common to and shared by all Service Areas, with no provisions for the transmission and retrieval of local program context for inclusion on even these "super regional" channels.

In response to these declarations of deficiency, Cox's witnesses explained that Cox's dedicated access channels are unique to each Service Area. They reiterated that with Cox's remote hub site facility design and common RF combining architecture, RF signals have the capability to either remain node, area, region or state specific, or can be broadcast to all town, simultaneously.44

Cox notes that Full Channel has stated that in the absence of the dedicated Bcable I-Net, no interconnection of multiple cable television producers can be accomplished to provide common access for PEG access users within the Service Area.

<sup>&</sup>lt;sup>43</sup> <u>Id</u>.. <sup>44</sup> <u>Id</u>., p. 19.

In response to this declaration of deficiency, Cox's witnesses assured the Division that the use of its FSN to provide I-Net functionality will have no impact at all on the statewide interconnect.<sup>45</sup>

In their closing comments, Messrs. Wolfe, Gardiner and Lynch stated that Cox had provided copies of the instant petition to the chief executives of each Rhode Island municipality that it serves or that is contiguous to a community that it serves. Copies were also provided to all active Citizens Advisory Committees.<sup>46</sup>

Cox's witnesses also stated that if the Division determines that Cox must receive a waiver relative to the I-Net issue, Cox requests that the Division examine the propriety of the waiver petition based on Section 1.12 of the Rules rather than on Section 7.1 (b) of the Rules. In effect, Cox would rather the Division consider the matter in the context of "public interest" (Rule 1.12) instead of in the context of whether strict compliance with Section 7.3 would "endanger the economic viability of the system".<sup>47</sup> Cox's witnesses observed that basing the decision on public interest considerations would be consistent with previously issued Division decisions regarding I-Net related waivers.<sup>48</sup>

In their final comments, Cox's witnesses asked the Division to also consider the competition Cox faces from satellite service providers, who are not required to provide I-Net services. They contended that upward cost pressure on its cable

<sup>&</sup>lt;sup>45</sup> <u>Id</u>.

<sup>&</sup>lt;sup>46</sup> Id.

<sup>&</sup>lt;sup>47</sup> Id., pp. 19-20.

<sup>&</sup>lt;sup>48</sup> <u>Id</u>.

services endangers Cox's ability to compete with these and other types of competitors.<sup>49</sup>

### VI. ADVOCACY SECTION'S INITIAL RESPONSE

On December 21, 2000, the Advocacy Section filed a response with the Division regarding Cox's petition filing.<sup>50</sup> In its response, the Advocacy Section recommended that the Division not undertake an inquiry into whether Cox's existing I-Net arrangements comply with the Rules. The Advocacy Section characterized such an inquiry as a "waste of time" in view of the technological advances that have taken place since the promulgation of Section 7.3 of the Rules.

Regarding the issue of a waiver, the Advocacy Section indicated that Cox must prove to the Division that its current proposal satisfies the substantive requirements of Section 7.3 (b), (c) and (d). The Advocacy Section had not reached a conclusion on this issue at the time of its initial response.

The Advocacy Section also addressed the standard the Division should apply relative to Cox's waiver request and the type of waiver that would be appropriate. On the issue of a standard, the Advocacy Section cited Section 7.1 (b) of the Rules as controlling. Relying on this section, the Advocacy Section related that the legal test is whether "strict compliance" with the rule will endanger the economic viability of the system. With respect to Cox, the Advocacy

<sup>&</sup>lt;sup>49</sup> Id., p. 21.

<sup>&</sup>lt;sup>50</sup> Advocacy Section Exh.1.

Section suggested that the Division must consider "the extraordinary costs associated with the installation of a separate cable network".<sup>51</sup>

On the issue of the type of waiver that would be appropriate, the Advocacy Section asserted that "permanent waivers to substantive provisions of the Division's Rules should never be granted". <sup>52</sup> Instead, the Advocacy Section recommended that if the Division ultimately grants a waiver to Cox in this docket, that the waiver be "temporary" in nature. The Advocacy Section also suggested that the Division amend Section 7.3 of the Rules, through a separate rule-making process, if the Division determines that its provisions are no longer in the public interest. <sup>53</sup>

# VII. ADVOCACY SECTION'S DIRECT CASE

The Advocacy Section presented its direct case through the prefiled testimony of its expert witness, Mr. Patrick Mahoney.<sup>54</sup> Mr. Mahoney began his testimony by offering the following summary of Cox's FSN I-NET design and the additional non-video services it proposes to offer eligible I-NET users:

Cox intends to provide the capacity necessary to support a combination of two-way video and data services for Rhode Island municipal institutional buildings and twenty-five designated State buildings. The proposal will accomplish "B cable functionality" by combining an upstream video stream and downstream video streams with an internet access offering via cable modem technology. All municipal locations and twenty-five designated State locations will be able to originate video and obtain free internet access over Cox's residential cable network. Each municipality and the State will have the use of an upstream video stream, one video stream downstream and two additional

<sup>&</sup>lt;sup>51</sup> <u>Id</u>., p. 3.

<sup>&</sup>lt;sup>52</sup> Id.

<sup>53</sup> **Id** 

<sup>&</sup>lt;sup>54</sup> Advocacy Section Exh. 2.

downstream video streams. Regions (most likely defined by service area) will have one downstream video stream and one upstream video stream. Municipal and State locations, engaging in point-to-point program origination, will schedule their broadcasts with Cox to avoid conflicting use of the streams and to ensure proper receipt of programming by community and State locations. In addition, Cox will provide free cable modem data service at upstream and downstream speeds of 128 Kbps/128 Kbps to municipal and designated State locations. Each location will be entitled to three IP addresses free of charge. Additional IP addresses can be purchased for \$7.00 per month, along with internet services such as e-mail, web hosting, etc. at current market rates.<sup>55</sup>

Mr. Mahoney also indicated at the outset of his testimony that he believed that Cox's proposal "will afford Rhode Island municipalities and the State with the functionality and flexibility to assess their video and data needs and to implement the appropriate technological solution that best satisfies these needs".<sup>56</sup>

Mr. Mahoney testified that in order to use Cox's proposed virtual video network to conduct point-to-point video origination, municipalities and the State would need to first determine the locations from which to originate programming. Once determined, the municipality or State agency will have to ascertain whether Cox's cable network has been extended to the desired location(s). Mr. Mahoney related that if a connection to the location does not already exist, the municipality or State agency would be required to contact Cox so that service may be extended to the appropriate location(s). Mr. Mahoney explained that under Cox's proposal, Cox would provide a standard installation of up to 150 feet, free of charge.<sup>57</sup> He

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<sup>&</sup>lt;sup>55</sup> Id., p. 3.

<sup>&</sup>lt;sup>56</sup> Id., pp. 3-4.

<sup>&</sup>lt;sup>57</sup> <u>Id</u>., p.5.

noted that for installations in excess of 150 feet, Cox will charge on a time and materials basis.<sup>58</sup>

Mr. Mahoney additionally explained that I-NET users will need to purchase and/or lease most of the following "end-equipment" per location:

CODEC \$5,000 to \$23,000 per CODEC \$2,000 to \$5,000 per camera Camera Monitor/TV \$500.00 to \$2,500 per device Rented for \$6.15/mo. Set-top box Scheduling software \$200.00 per license \$300.00 to \$1,000.00 per device Video modem \$250.00 to \$700.00 per device CD Player (digital) \$250.00 to \$700.00 per device Tape player Cabling (Insufficient Data To Estimate Cost) Approx. \$2,000.00 per Modulator (digital) modulator.59

Mr. Mahoney related that Cox would provide each I-NET user with a list of equipment that is compatible with Cox's FSN and vendors who supply the equipment.<sup>60</sup> Mr. Mahoney also related that Cox has indicated that it will provide technical assistance to ensure that the equipment at each municipal and designated State location is correctly installed and functioning properly.<sup>61</sup>

Mr. Mahoney next related that Cox's virtual video network would be operated on a regional, municipal and statewide basis, rather than on a CATV Service Area basis. He explained that Cox has proposed two statewide video streams and two municipal-specific streams.<sup>62</sup>

38 <u>Ia</u>.

<sup>&</sup>lt;sup>58</sup> Id.

<sup>&</sup>lt;sup>59</sup> Id., pp. 5-6.

<sup>&</sup>lt;sup>60</sup> Id., p. 6.

<sup>&</sup>lt;sup>61</sup> Id.

<sup>&</sup>lt;sup>62</sup> <u>Id</u>., p. 7.

Mr. Mahoney also discussed the limitations of Cox's I-NET proposal. Mr. Mahoney related that as long as different nodes can be utilized within a municipality, the simultaneous live cablecasting of two events within the same city or town should not pose a problem.63 He testified, however, that multiple program cablecasts originating from locations in close geographical proximity within the same municipality could pose a challenge. Mr. Mahoney explains that the challenge results from "the limited upstream capacity within the 'last mile' of the network."64 According to the witness, if multiple programs must use the same node in Cox's FSN, users will have to coordinate their broadcast schedules.<sup>65</sup>

Mr. Mahoney noted, however, that technologies could be employed to ameliorate these upstream congestion problems. He explained that "digital technology and wavelength and time division multiplexing" could be used to mitigate return path traffic problems when they arrive. Mr. Mahoney also emphasized that there is a cost associated with implementing this technology. He testified that municipalities and the State would have to decide if they desire to incur these costs.66

Mr. Mahoney next discussed the issue of whether a physically separate Bcable ought to be used for providing I-NET services. Regarding this question, Mr. Mahoney advised against the construction of a separate cable dedicated to I-NET He characterized such construction as "an extremely expensive users.

<sup>63</sup> <u>Id.</u> p. 8.

 $<sup>^{64}</sup>$   $\overline{\mathrm{Id}}$ .

<sup>66 &</sup>lt;u>Id.</u> p. 9.

proposition", estimating the cost at "tens of millions of dollars" for Rhode Island.<sup>67</sup> He also voiced concerns over the separate operating and maintenance costs that would be borne by ratepayers.<sup>68</sup>

Mr. Mahoney additionally questioned the benefits to be achieved from duplicating Cox's residential network for I-NET users. He related that demand for I-NET service in Rhode Island is "unclear." He stated that there is no way of determining whether communities would use the I-NET service, even if a separate B-cable were available.<sup>69</sup> Mr. Mahoney testified that to:

...require the duplication of facilities in light of this unclear demand and the extraordinary construction, operating and maintenance expenses, in my opinion, would be extremely wasteful of ratepayer and consumer funds.<sup>70</sup>

Mr. Mahoney thereupon opined that utilizing Cox's existing facilities to provide:

...virtually the same degree of video service and even more internet access service than has been historically utilized by institutional users makes eminent sense from a cost/benefit perspective.<sup>71</sup>

Mr. Mahoney also expressed support for Cox's I-NET proposal based on Cox's commitment to not pass any of its related costs onto I-NET users or residential customers.<sup>72</sup>

Mr. Mahoney next turned his attention to Cox's "virtual data network offering". He explained that Cox's virtual data offering affords municipalities and

68 <u>Id</u>.

<sup>&</sup>lt;sup>67</sup> Id.

<sup>&</sup>lt;sup>69</sup> <u>Id</u>., p.10

<sup>&</sup>lt;sup>70</sup> Id.

<sup>&</sup>lt;sup>71</sup> Id.

<sup>&</sup>lt;sup>72</sup> <u>Id</u>.

the State with two options. He described the two options as: "Virtual Area Network" ("VAN") and "cable modem based internet access". 73

Mr. Mahoney testified that under option 1, the VAN, municipalities and the State would only be able to transmit and receive data from point-to-point at 128 Kbps. Mr. Mahoney related that if these I-NET users desire internet access or other internet services, like e-mail or web-hosting, then they will have to purchase those services separately from Cox or another provider at market rates.<sup>74</sup>

Mr. Mahoney also explained that under the VAN option, I-NET users would be responsible for all end-user equipment, including monitors, software, cabling, computers and 'certain network control devices'.<sup>75</sup> He added that users might also ensure security by purchasing and employing the appropriate firewall technology.<sup>76</sup>

Mr. Mahoney testified that "network control devices" would be necessary should a municipality wish to control the user base of the VAN. He explained that deploying the VAN as a routed architecture would require devices such as routers. Mr. Mahoney related that the necessary routers would cost between \$1,500 and \$3,000, depending upon the number of users and the type of device that is purchased.<sup>77</sup>

Mr. Mahoney testified that under Option 2, Cox would provide municipalities and designated State locations with free cable modem-based

<sup>74</sup> <u>Id</u>., pp. 11-12.

<sup>&</sup>lt;sup>73</sup> <u>Id.</u>, p. 11.

<sup>&</sup>lt;sup>75</sup> Id., p.12.

<sup>&</sup>lt;sup>76</sup> Id.

<sup>&</sup>lt;sup>77</sup> <u>Id</u>., p.13.

Internet service at the upstream and downstream rates of 128 Kbps. He related that Cox would also provide three Internet provider ("IP") addresses to these locations at no charge.<sup>78</sup> Mr. Mahoney noted however, that I-NET users who select Option 2 would be limited to the cable modem-based Internet access service selected by Cox.<sup>79</sup>

Mr. Mahoney also related that other Internet services, like e-mail and web hosting, are also available for purchase under Option 2.80 He testified that web hosting would cost between \$15.00 and \$40.00 per location. He added that email might often be obtained free or for a minimal charge with the purchase of a web-hosting service. Mr. Mahoney also noted that domain name registration would cost about \$20.00 per year per location.<sup>81</sup> He additionally related that, as with the VAN option, users may ensure security by employing firewalls and encryption technology.82

Mr. Mahoney also explained that I-NET users may purchase and receive speeds greater than the 128 Kbps that comes standard under Option 2. Mr. Mahoney indicated that while 128 Kbps is approximately five times faster than standard dial-up service, it is approximately twice as slow upstream and twelve times as slow downstream compared to the standard commercial, high-speed Internet service of 256 Kbps/1.5 Mbps.83

<sup>&</sup>lt;sup>78</sup> <u>Id</u>.
<sup>79</sup> <u>Id</u>.
<sup>80</sup> <u>Id</u>.

<sup>&</sup>lt;sup>81</sup> Id., p.14.

<sup>&</sup>lt;sup>83</sup> Id.

Mr. Mahoney also provided some reasons why an I-NET user would select one option over the other. He related that "it depends upon what needs the governmental organization desires to satisfy through its use of the virtual data network". Mr. Mahoney observed that since many organizations will desire free Internet access for their employees, he predicted that most I-NET users would select Option 2. He noted however, that if a community only desires to use the virtual data network to effect transport within the network, the VAN option might be the more attractive alternative. He added that a community choosing Option 1 "can then add desired Internet services to the VAN over time as allowed for by its budget." 85

Mr. Mahoney pointed out that no matter which option is selected, in order to obtain Internet access, each I-NET user will also have to purchase "Data-Over-Cable Interfaces Specification (DOCSIS) modems", along with other end-equipment monitors, software and cabling.<sup>86</sup> Mr. Mahoney related that Cox has offered to provide the DOCSIS modems to I-NET users at cost (\$200-\$400) plus a 15 percent markup.<sup>87</sup> He also related that Cox has offered to provide each I-NET user with a list of equipment and vendors for the implementation of Option 1 or Option 2.<sup>88</sup>

Mr. Mahoney also pointed out that I-NET users would be responsible for the costs associated with all internal wiring beyond the first outlet and all nonstandard installations. Mr. Mahoney related that Cox would charge for these

<sup>&</sup>lt;sup>84</sup> <u>Id</u>., p. 15.

<sup>85 &</sup>lt;u>Id</u>., p. 16.

 $<sup>^{86}</sup>$   $\overline{\mathrm{Id}}$ .

<sup>87</sup> Id

 $<sup>^{88}</sup>$   $\overline{\mathrm{Id}}$ .

items on a time and materials basis. He noted that Cox's current labor rates range between \$32.00 and \$95.00 per hour.<sup>89</sup>

Mr. Mahoney observed that under Cox's proposal, Cox would be responsible for the initial installation of the equipment necessary to effect data service from locations within the community. He related that Cox plans to dedicate technical, construction and engineering resources to implement each request on a first-come, first-served basis.<sup>90</sup> He related that Cox plans to complete at least ten installations per month.<sup>91</sup>

Mr. Mahoney next observed that under Cox's proposal, it is not clear what kind of municipal and State buildings are qualified to receive Cox's virtual data network offering. He testified that at this time "it appears that locations that are qualified to receive the virtual video offering will also qualify to receive the data offering". He related that of these locations, only municipal and 25 primary State locations would be entitled to free internet service and the discounted higher-speed data transport rates being offered under the proposal. He

In his closing comments, Mr. Mahoney made the following observations regarding Cox's proposal:

<sup>&</sup>lt;sup>89</sup> <u>Id</u>., p. 17.

<sup>&</sup>lt;sup>90</sup> Id

<sup>&</sup>lt;sup>91</sup> <u>Id</u>.

<sup>&</sup>lt;sup>92</sup> Id., p. 18.

<sup>&</sup>lt;sup>93</sup> Id..

<sup>94</sup> Id..

- That once the equipment is installed and functioning properly, the network administrators of the State and municipalities will assume the routine operation of the virtual data networks at their respective locations.<sup>95</sup>
- That as a condition of Cox's proposal, the State and municipalities would be barred from giving, selling, reselling or otherwise distributing data or transport capacity.<sup>96</sup>
- That Cox has guaranteed the discounted data transport rates contained in the proposal for only three years. That after the three-year period has expired, Cox will adjust its rates no more than once during every 18-month period.<sup>97</sup>
- That with the exception of prices for basic service and equipment, Cox contends that prices for all other services are deregulated, and therefore, not subject to Division scrutiny.<sup>98</sup>

As a final conclusion, Mr. Mahoney opined that "Cox's proposal potentially will provide municipal and State institutional users with virtually the same video functionality as the B cable". 99 He also supported the free Internet access contained in the proposal and the proposal's flexibility, which allows eligible I-NET users to "tailor the offering to their unique video and data needs". 100

Mr. Dominico Kullberg was first offered by the Advocacy Section in

<sup>96</sup> <u>Id</u>., p. 19.

<sup>&</sup>lt;sup>95</sup> <u>Id</u>.

<sup>97</sup> Id.

<sup>98</sup> Id.

<sup>&</sup>lt;sup>99</sup> <u>Id</u>., p. 20.

<sup>&</sup>lt;sup>100</sup> <u>Id.</u>, p. 21.

response to questions being posed by the Attorney General regarding the cost of a particular piece of hardware. Specifically, Mr. Kullberg opined that in order to generally achieve a broadcast-quality television image over the I-Net the user would need to use a video decoder ("CODEC") that falls in the middle of the price range for this type of hardware, about \$10,000.101 Mr. Kullberg did explain, however, that the specific CODEC required hinges upon the type of programming being broadcast. He related that "/y/ou would need a higher compression or lower compression type CODEC if you have a lot of action, say a sporting event....If it's a Town Council type meeting, a lower type of CODEC or a more inexpensive type CODEC would probably be sufficient". 102

Mr. Kullberg was subsequently recalled by the Advocacy Section to rebut public comments and statements posited by Full Channel that questioned the relative channel capacity of Cox's FSN I-Net proposal vis a vis the minimum channel capacity mandated under Section 7.3 of the Rules. He was also asked to evaluate a concomitant equipment modification that Cox had suggested during the hearing process in response to concerns raised about the expense I-Net users would incur in utilizing the newer FSN technology, infra.

Regarding channel capacity, Mr. Kullberg rejected statements made by Full Channel and a member of the public who claimed that Cox's FSN I-Net alternative is unable to provide the 12 upstream channel capacity required under the current Rules. Mr. Kullberg related that because Cox would provide one upstream

 $<sup>^{101}</sup>$   $\underline{6/28/01},$  Tr. 227 and 229.  $^{102}$   $\underline{Id.},$  Tr. 228-229.

channel per node and because a Service Area could have hundreds of nodes, Cox's proposed FSN I-Net "could have hundreds of upstream channels theoretically". 103 Mr. Kullberg also related that channel capacity in a specific node could also be easily expanded in response to a demonstration of needed augmented capacity. He explained that Cox could split the node, digitalize an upstream channel, use "block-up conversion" technology or add fiber directly to an I-Net institution in order to expand the channel capacity in an individual node. 104 Mr. Kullberg opined that through this currently available advanced technology, Cox could "bring that number of channels [12 upstream] up almost to infinity". 105 Predicated on the technology available for expanding upstream capacity, Mr. Kullberg concluded that Cox's FSN I-Net would satisfy the existing channel capacity requirements contained in Section 7.3 of the Rules. 106

On Cox's modified equipment proposal, Mr. Kullberg testified that "...the proposal is a good proposal". 107 He opined that:

"...in addition to being able to broadcast both in analog, which is at a lower cost, but to be able to do it on the full service network, which is ubiquitous in the network, really adds a lot of functionality and capability to their proposal as opposed to the traditional closed B-system where it is only accessed at certain individual sites dictated by the service area. The network that they are proposing to use in that scenario covers the entire service area all the way to the customer hub". 108

<sup>103</sup> <u>12/10/01</u>, Tr. 149.

<sup>&</sup>lt;sup>104</sup> <u>Id</u>. Tr. 149-155.

<sup>&</sup>lt;sup>105</sup> Id. Tr. 149.

<sup>&</sup>lt;sup>106</sup> Id. Tr. 152-153 and 156-157.

<sup>&</sup>lt;sup>107</sup> Id. Tr. 156.

<sup>&</sup>lt;sup>108</sup> Id. Tr. 156-157.

### VIII. FULL CHANNEL'S INITIAL POSITION

Full Channel did not present a direct case in this docket. However, in response to a directive imposed by the Division, Full Channel did file a "Position Statement" prior to the commencement of hearings. 109

Full Channel asserts that the issue being raised by Cox is more "legal" than "fact driven." Full Channel contends that:

Expert testimony is irrelevant and of little or no probative value in terms of how the Administrator must weigh any request to change, modify or otherwise waive the current requirement.<sup>110</sup>

Full Channel maintains simply, that Section 7.3 of the Rules requires a physically separate I-Net cable, and that Cox must comply.

Full Channel additionally contends that Rhode Island General Laws, Section 39-19-3 ("R.I.G.L. § 39-19-3") mandates that Cox not be allowed to operate in competition with Full Channel under terms and conditions "more favorable or less burdensome than those imposed on the incumbent company." In short, Full Channel asserts that it would be unfair to Full Channel and a violation of R.I.G.L. § 39-19-3 if the Division permitted Cox to provide I-Net services without employing a physically separate B-cable as required pursuant to Section 7.3(a) of the Rules.

In addition to the requirement of a physically separate B-cable loop, Full Channel further asserts that Cox must adhere to all the other requirements set forth in Section 7.3 of the Rules. Full Channel enumerated the following

<sup>&</sup>lt;sup>109</sup> Full Channel Exh. 1.

<sup>&</sup>lt;sup>110</sup> <u>Id.</u>, p. 1.

requirements, which it contends Cox must satisfy as a condition of authority to operate a CATV system in Rhode Island:

- 1. Construct the I-net, same as Full Channel;
- 2. Provide each institution designated system at its own (Cox's) expenses [sic] (Section 7.3 (a));
- 3. Provide residential and I-Net service for all police states [sic], fire stations etc. (7.3(b)(2));
- 4. Capable of 21 downstream television channels (7.3(c));
- 5. Capable of 12 upstream television channels (7.3(d));
- 6. All within one year of Certificate (7.3(e)).<sup>111</sup>

Full Channel asserts that although the Division has flexibility to waive provisions of the Rules, it does not have the same flexibility with respect to the provisions of R.I.G.L. § 39-19-3, <u>supra</u>. Full Channel contends that predicated on the protections afforded incumbent CATV companies under R.I.G.L. § 39-19-3, the Division is precluded from authorizing Cox: "... to do anything less technologically or less expensive or less than required" than mandated under the requirements of Section 7.3 of the Rules.<sup>112</sup>

Full Channel additionally criticized Cox for not already having a physically separate and operational B-cable in place in each of its authorized Service Areas. Full Channel opined that Cox has and continues to be in violation of Section 7.3 of the Rules in order "to save millions of dollars in construction cost". 113

Full Channel also rejected Cox's claim that the I-Net infrastructure mandated under the current Rules is obsolete. Full Channel states that the coaxial cable for constructing a physically separate I-Net "is being sold and used"

<sup>112</sup> <u>Id.</u>, pp. 2-3.

<sup>&</sup>lt;sup>111</sup> <u>Id.</u>, p. 2.

<sup>&</sup>lt;sup>113</sup> <u>Id.</u>, p. 6.

daily by cable companies throughout the United States". <sup>114</sup> Full Channel additionally questioned the qualifications of Mr. Wolfe with regard to his statements about issues involving:

... engineering, programming, rate structure, I/I network alternative technology, broadband platform, full service network, construction scheduling, public access programming, public studio equipment, preparation of legal documents, digital television, telephone and internet data services.<sup>115</sup>

Full Channel further questioned whether the Division could grant Cox's petition in the absence of a finding that Cox was in full compliance with all of the Division's CATV Rules. Full Channel asserted that before the Division "can even consider" the instant petition, the Division must:

- 1. Determine whether Cox is operating its cable television system according to Rhode Island General Laws and Rules Governing Community Antenna Television Systems. If the answer is no, then Cox should be mandated to operate in accordance with the rules.
- 2. Reexamine dockets 94 C-14, 95C-3, 96 C-2, 96 C-3, 99 C-2 and hearings associated with those dockets.
- 3. Reestablish Service Area Citizens' Advisory Committees as required in Chapter 15 of the Rules.
- 4. Reestablish the cable television advisory council as required in section 15.2 of the rules. All public input to date has demanded (especially in Service Area 5) (the only area where a public hearing has been held at night in the service area affected) that no waivers of any kind for I/I Network or access channels be granted to Cox Communications. Thus it has been determined it will not be in the public interest to grant any waivers to Cox in Area 5 or any other service area. 116

Full Channel next attacked Cox's claim that its "so-called alternative

<sup>115</sup> <u>Id.</u>, pp. 6-7.

<sup>&</sup>lt;sup>114</sup> Id.

<sup>&</sup>lt;sup>116</sup> <u>Id.</u>, p. 8.

technology" is in the public interest. Full Channel questioned whether Cox's proposal would provide standard installations to all eligible I-Net users identified in the Rules.<sup>117</sup> Full Channel also questioned the actual meaning of the terms "I-Net functionality," "Full Service Network" and "Advanced Broadband Platform" as used by Cox in its petition. 118 Full Channel indicated that it did not recognize any of these terms as "acceptable reasons" for granting the instant waiver request.119

Full Channel asserted that Cox must demonstrate that its FSN would provide "...better I-Net service than would be available through a physically separate I-Net 'B' cable". 120 Similarly, Full Channel asserted that Cox must demonstrate that the waiver it seeks is actually in the public interest. Channel characterized the I-Net requirements contained in the Rules as one of Rhode Island's "greatest assets from the cable industry". 121

Full Channel acknowledges that the construction of a physically separate I-Net is costly and "burdensome." However, Full Channel maintains that the associated cost and burden is offset by the benefit Cox receives from the State's decision to not compel Cox to pay "franchise fees and surtaxes." Full Channel argues that Cox must prove that the cost of constructing a B-cable infrastructure would be so costly as to constitute a "hardship" for Cox and a "detriment" to the public.<sup>122</sup>

<sup>&</sup>lt;sup>117</sup> <u>Id.</u>, p. 9. <sup>118</sup> <u>Id.</u>

<sup>&</sup>lt;sup>120</sup> Id., p. 10.

<sup>&</sup>lt;sup>122</sup> <u>Id.</u>, p. 13.

Full Channel contends that Cox's proposal to allow 'eligible participants' to utilize its broadband network for certain high speed data services "is not enough to justify the nonexistence of an institutional/industrial network as provided for educators, religious leaders, schools, police and fire personnel, universities and the citizens of Rhode Island". Full Channel also contends that Cox's plans to offer telephone service in Rhode Island "should have no consideration in this petition". Similarly, Full Channel contends that offers for discounted rates for Internet access and telephone services are irrelevant with respect to Cox's obligations under Section 7.3 of the Rules. 125

Full Channel declares that the I-Net provisions of Section 7.3 of the Rules "is as viable and valuable" to the citizens of Rhode Island today as when they were first introduced. 126

Full Channel also disagreed with Cox's opinion that State government buildings are not included in the "eligible institutions" under Section 7.3 of the Rules. Full Channel asserts that such buildings are contemplated in Section 7.3(b)(1) of the Rules.<sup>127</sup>

Full Channel also took exception to Cox's claim that a physically separate B-cable has no place in a modern CATV system. Full Channel noted that it is currently upgrading its CATV system to 750 MHz and will also be offering Internet access, digital television and telephone service. Full Channel stated that even

<sup>&</sup>lt;sup>123</sup> <u>Id.</u>, p. 15.

<sup>124</sup> Id.

<sup>&</sup>lt;sup>125</sup> <u>Id.</u>, p. 16.

<sup>&</sup>lt;sup>126</sup> Id., p. 19.

<sup>&</sup>lt;sup>127</sup> Id.

with these upgrades, it still plans to provide I-Net service through a physically separate B-cable. 128

Full Channel additionally asserts that Cox's proposal to utilize "a simple six megahertz RF channel on the sub-low return path of the residential cable" constitutes less capacity than the 33-channel, 198-megahertz bandwidth required under Section 7.3.<sup>129</sup> Full Channel contends that this fact, coupled with Cox's use of an FSN integrated I-Net infrastructure, will result in the need for "special arrangements, training, system technical personnel and user expense" for Cox's I-Net users.<sup>130</sup>

Full Channel also criticized Cox's statement that it has experienced little demand for an I-Net in its authorized Service Areas. Full Channel contends that had Cox not "abandoned" its I-Net obligations there would be a demand for the service. Full Channel notes that in its Service Area, where it maintains a B-cable I-Net, there are many organizations using the service. Full Channel proclaims that 'if you build it, they will come'. 132

# IX. ATTORNEY GENERAL'S INITIAL POSITION

Like Full Channel, the Attorney General elected not to present a direct case in this docket. As required by the hearing officer, the Attorney General did however submit a position statement.<sup>133</sup>

<sup>131</sup> <u>Id.</u>, p. 22.

<sup>&</sup>lt;sup>128</sup> <u>Id.</u>, p. 20.

<sup>&</sup>lt;sup>129</sup> <u>Id.</u>, p. 21.

<sup>130</sup> Id.

<sup>&</sup>lt;sup>132</sup> Id., p. 23.

<sup>133</sup> Attorney General Exh. 1.

In its position statement, the Attorney General observes that Section 7.3 of the Rules requires cable television companies to do several things with respect to an I-Net "regardless of the technology used". The Attorney General identified the following six requirements, which it opines Cox must satisfy:

- 1. Cox must construct the I-Net trunk and distribution system at Cox's own expense (Section 7.3(a));
- 2. Cox must provide each institution designated for inclusion in the I-Net a standard installation for both the residential and I-Net networks at Cox's expense (Section 7.3(a));
- 3. Cox must provide residential and I-Net service for <u>all</u> police stations, fire stations, municipal buildings, hospitals, public libraries, schools, universities, colleges, and religious institutions within the service area (plus such other significant community institutions as the Administrator of the Division may designate) (Section 7.3(b)(2));
- 4. Cox must provide an I-Net capable of (the equivalent of) at least twenty-one (21) downstream television channels on frequencies above 168 MHz (Section 7.3(c));
- 5. Cox must provide an I-Net capable of (the equivalent of) at least twelve (12) upstream television channels on frequencies between 5 and 108 MHz (Section 7.3(d)); and,
- 6. Cox must do all of this within one year of receipt of a Certificate of Authority to Operate (at least within those areas where it has completed and brought on line its residential services) (Section 7.3(e)). 135

The Attorney General acknowledged that Section 7.3 of the Rules specifically contemplates "the use of alternative technologies to achieve the actual connectivity required for a functioning I-Net". <sup>136</sup> However, the Attorney General does not concede that the Rules authorize Cox to shift any additional costs of using an alternative technology to the institutions using the I-Net. <sup>137</sup>

<sup>&</sup>lt;sup>134</sup> <u>Id.</u>, p. 3.

<sup>&</sup>lt;sup>135</sup> <u>Id.</u>, pp. 3-4.

<sup>&</sup>lt;sup>136</sup> Id., p. 5.

<sup>&</sup>lt;sup>137</sup> Id.

The Attorney General contends that if the alternative technology chosen by Cox requires additional equipment above and beyond that required by the technology specified in Section 7.3 of the Rules in order for an institution to make use of the standard residential and I-Net installation, Cox "must absorb those additional costs". The Attorney General asserts that:

Cox may charge for the services provided, but not for the work required for a single standard installation inside each qualified and eligible institution, nor for the equipment required to enable a single standard television to display the video content of a standard installation.<sup>139</sup>

The Attorney General additionally raised concerns regarding the protections afforded Full Channel under Rhode Island General Laws, §39-19-3, <u>supra</u>. Specifically, the Attorney General requested that the Division consider whether Cox must be compelled to construct a physically separate B-cable in Full Channel's Service Area in order to ensure that Cox's authority to operate in that Service Area is not "more favorable or less burdensome" than Full Channel's. 140 141

#### X. COX'S I-NET DEMONSTRATION AND PROPOSAL MODIFICATION

On December 3, 2001 Cox provided a record demonstration of how it plans to utilize its FSN as an alternative technological means of providing the I-Net video functionality required under Section 7.3 of the Rules. The demonstration

139 <u>Id.</u>

<sup>&</sup>lt;sup>138</sup> <u>Id.</u>

<sup>&</sup>lt;sup>140</sup> <u>Id.</u>, pp. 5-6

<sup>&</sup>lt;sup>141</sup> In the time since the Attorney General proffered this position, the Division issued its final report and order in Docket No. D-00-C-5, a docket established in response to Cox's April 20, 2000 application for a Compliance Order Certificate in Service Area 5 (Order No. 16646, issued on 6/26/01). In that Report and Order, the Division determined that R.I.G.L. § 39-19-3 does not require Cox to build a physically separate B-cable in Service Area 5. Instead, the Division found that R.I.G.L. § 39-19-3 mandates that Cox build an I-Net in Service Area 5, which is the functional equivalent of the I-Net described in Section 7.3 (Order No. 16646, pp. 63-69).

took place at the Woonsocket High School, a location where, according to Cox, its B-cable I-Net infrastructure is still actively used. During the demonstration Cox presented a side-by-side comparison of how the B-cable and FSN I-Nets actually work. Cox also identified and discussed the different network architectures and associated user equipment.

During the demonstration Mr. Wolfe explained that in response to concerns raised about associated equipment costs, Cox has decided to modify its proposed FSN I-Net service by substituting an "analog" interface for the "digital" interface technology originally proposed. Indeed, the demonstration provided by Cox at the Woonsocket High School utilized this "analog" technology. Mr. Wolfe related that by using analog technology the user equipment necessary to utilize Cox's alternative FSN I-Net service would be comparable to the cost of the user equipment associated with a B-cable I-Net service. Mr. Wolfe related that when the cost of digital equipment becomes less expensive, Cox would convert to a digital interface architecture. He did note, however, that the "digital" service would remain available and provided by Cox on a customer demand basis. 142

To quantify the equipment cost savings under the modified proposal, Cox again presented Mr. Stephen Lynch, its Director of Network Development. Mr. Lynch sponsored an "Equipment Cost Summary" schedule, which he offered to compare the relative equipment costs between "B-Cable" and "analog" I-Net

 $<sup>^{142}</sup>$   $\underline{12/10/01}$ , Tr. 162-163.

architectures.<sup>143</sup> According to Mr. Lynch, I-Net institutions utilizing Cox's proposed analog interface will see very comparable equipment costs between the two technologies. He projected the aggregate cost at \$2006 for eligible users utilizing the analog interface technology, compared to a cost of \$1850 for comparable B-cable equipment (Id.). Mr. Lynch also testified that Cox is currently exploring another technology that would use a personal computer as a CODEC device for creating a digital interface. He projected the cost of this "indevelopment" alternative at \$1992.<sup>144</sup>

#### XI. PUBLIC COMMENTS ON COX'S PETITION AND DEMONSTRATION

Six members of the public appeared to offer comment on Cox's petition and/or demonstration in this docket.

These individuals were identified as Mr. Milton Nachbar, a local public access producer; Mr. Michael Barr, a local public access producer; Mr. George K. Loftus, Executive Director, Ocean State Higher Education, Economic Development & Administrative Network ("OSHEAN"); Mr. William J. Fiske, Coordinator of Instructional Technology, Rhode Island Department of Education; Mr. Stephen Roy, Chairman, Service Area 5 Citizen's Advisory Committee; and Mr. Michael McGonagle (a.k.a. Mike Davis), a Warwick resident. 145

The tenor of the public comments were as follows:

• That Cox must do a better job educating eligible I-Net users about the utility of the I-Net services available to them.

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<sup>143</sup> Cox Exh. 5

<sup>144</sup> Id. and 12/10/01, Tr. 99-100

<sup>&</sup>lt;sup>145</sup> See footnote 10.

- That the demand for I-Net services will increase when eligible users become aware of its availability and understand how it may be used to serve their needs.
- The overall benefit to the community must be considered in determining whether Cox's proposed "virtual" I-Net is superior to the physically separate cable infrastructure required under the Division's CATV Rules.
- The equipment necessary to utilize Cox's proposed FSN I-Net may be too expensive for eligible users to take advantage of the newer technology.
- The Division ought to consider directing Cox to provide the necessary equipment to eligible users free of charge.
- That the Division require Cox to provide the same channel capacity (12 upstream and 21 downstream) as required under the current Rules.
- That the demonstration provided by Cox reflected a "herky-jerky" video image, which appears to be of inferior quality compared to the images available through a separate B-cable architecture.
- That Cox's proposed FSN I-Net offers an advantage over a B-cable design because it offers advanced services not possible with the older B-cable infrastructure.
- That Cox should assign a "value" to the high-speed data transportation services it is proposing instead of a specific speed/capacity so that eligible users will be able to take advantage of technological advancements.

- That Cox should provide each eligible user with a "voucher" or "pool of funds" so that each user may decide how best to utilize the services available under Cox's proposal.
- The Division should impose a 3-year review procedure on Cox to ensure that its proposal has been appropriately implemented.
- Cox should partner with the educational community on some pilot projects designed to promote its I-Net proposal.
- Cox should be required to provide technical assistance, without cost to eligible users, as the use of Cox's proposed I-Net will require users to interact with Cox in order to utilize the available services.
- That the I-Net waivers that Cox inherited from some of its CATV company predecessors should not have been allowed to continue after Cox upgraded those systems.
- That the equipment needed to construct a B-cable I-Net is readily available today and that Cox's claim that the equipment is obsolete and unavailable is without merit.
- That if the I-Net is implemented and managed properly, it could satisfy
   100 percent of the telecommunications and other data and video
   transport needs of the education and library communities.
- Schools and libraries should have access to the broadest and most technically advanced broadband services available.
- The I-Net should be designed to be useful to schools and libraries and that Cox should not expect to profit from these institutions.

#### SETTLEMENT AGREEMENT

At the conclusion of the June 27, 2001 hearing conducted in this docket, Cox and the Advocacy Section jointly notified the Division that they were involved in settlement discussions regarding the instant petition and moved for some additional time to determine if a settlement agreement was achievable. motion was granted. Cox and the Advocacy Section renewed their request for additional time on several subsequent occasions, each time granted by the Division. 146 However, in response to the parties' last request for additional time, the Division established a deadline for submitting a settlement proposal of October 3, 2002.<sup>147</sup> Cox and the Advocacy Section responded by submitting a "Settlement Agreement" proposal to the Division on October 2, 2002.<sup>148</sup> The Settlement Agreement, in its entirety, is attached to this report and order as "Appendix 3", and is incorporated by reference.

Upon receipt of the aforementioned Settlement Agreement, the Division conducted an additional public hearing in this docket. The hearing, conducted in the Division's hearing room on December 19, 2002, was held for the purpose of taking comments from the public and from the other parties in this docket relative to Cox's and the Advocacy Section's Settlement Agreement proposal.

# XIII. FULL CHANNEL'S RESPONSE TO SETTLEMENT AGREEMENT

After examining the Settlement Agreement submitted by Cox and the

<sup>&</sup>lt;sup>146</sup> See Order Nos. 17110 and 17159, issued on August 26, 2002 and September 23, 2002, respectively.

<sup>&</sup>lt;sup>148</sup> Cox/Advocacy Section Joint Exhibit 1.

Advocacy Section, Full Channel requested an opportunity to proffer its comments through an expert witness. This request was granted.

Full Channel's expert witness was identified as Mr. Alan S. Hahn, President of Hickory Mountain Associates, Inc., 38 Catherine Court, Ringwood, New Jersey. Mr. Hahn was qualified as an expert in I-Net design, development, construction and operations. Pursuant to a directive imposed on Full Channel by the undersigned hearing officer, Mr. Hahn presented his comments through pre-filed written testimony, filed with the Division on December 2, 2002.<sup>149</sup>

Mr. Hahn began his testimony by opining that I-Nets are not obsolete. He related that I-Net systems are commonly used and are even being upgraded with new advanced technology.

Mr. Hahn also opined that the FSN described in the Settlement Agreement proposal does not appear to comply with the "physically separate" and "dedicated I-Net" requirements contained in Section 7.3 of the Rules. He related that Cox's FSN would complicate I-Net operations because it would need to continually reassign bi-directional bandwidths, on a node-by-node basis, to accommodate the changing needs of I-Net users. He characterized this as a "basic problem...of bandwidth contention, where more than one potential user seeks to communicate via the I-Net simultaneously". 151

Mr. Hahn testified that he observed several additional inconsistencies between Cox's shared I-Net and Section 7.3 of the Rules. As a specific example,

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<sup>&</sup>lt;sup>149</sup> Full Channel Exhibit 2.

<sup>&</sup>lt;sup>150</sup> Id., p. 7.

<sup>&</sup>lt;sup>151</sup> Id.

Mr. Hahn cited a provision in the Rule that requires cable television companies to provide standard installations, at their own expense, to all I-Net institutions in their authorized service areas. In contrast, Mr. Hahn pointed out that the Settlement Agreement establishes a standard installation of only 150 feet from the I-Net to the user's premises, and only 12 cable feet within those premises. As another example, Mr. Hahn noted that the Settlement Agreement proposal would permit Cox to charge for data services provided at transmission rates greater than 128 kilobits per second, whereas Section 7.3 of the Rules makes no provision for any I-Net usage fees. 153

Mr. Hahn also expressed concern over the "Ramp-up Period" identified in the Settlement Agreement. He queried when this period would begin and how long it would take?<sup>154</sup>

He also expressed concern that the Settlement Agreement does not provide a clear description of how many nodes there are to be in the various service areas. He explained that the number and location of these nodes, when compared with the I-Net needs of the institutions within those node areas and service areas, would help to show the severity of potential bandwidth contention problems.<sup>155</sup>

Mr. Hahn additionally expressed concern that the Settlement Agreement proposal refers to a "Monthly Minimum Installation Requirement" and a

<sup>&</sup>lt;sup>152</sup> <u>Id</u>., pp. 7-8.

<sup>&</sup>lt;sup>153</sup> Id., p. 8.

<sup>&</sup>lt;sup>154</sup> Id.

<sup>&</sup>lt;sup>155</sup> <u>Id</u>.

"Reasonable Notice" without describing what the terms actually mean. He also observed that the Settlement Agreement makes no mention of the degree of Division oversight over I-Net staffing.

Mr. Hahn further criticized the Settlement Agreement for not clearly setting operational and technical standards for the I-Net. He related that standards "should be included and should take the form of current and quantifiable Quality of Service (QoS) standards, such as maximum Bit Error Rates for data services, overall Link Reliability standards, Mean-Time-Between-Failures (MTBF), Mean-Time-to-Repair Outages (MTTR), and so forth". 156

Additionally, Mr. Hahn observed that the Settlement Agreement refers to "DOCSIS" standards, but fails to specify the actual standard being used. He noted that there are several such standards and that Cox should clarify their compliance intent in this area.<sup>157</sup>

In his closing remarks, Mr. Hahn opined that a separate I-Net cable system would be a superior system for the public than the alternative proposed by Cox. He explained that it would be simpler to operate, utilize proven technologies such as analog television modulators, and can readily be configured to direct and redirect I-Net transmissions in response to the users' needs. Indeed, Mr. Hahn claimed that the only advantage of a "single, integrated network" is that it would be "less expensive for the operator". He also stated that he was not aware "of

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<sup>&</sup>lt;sup>156</sup> Id.

<sup>&</sup>lt;sup>158</sup> Id., p. 9.

any other integrated, 'functionality systems', such as that proposed by [Cox]...now in operation". 159

# XIV. COX'S REBUTTAL CASE

On December 11, 2002 Cox submitted pre-filed rebuttal testimony in response to the opinion offered by Full Channel's witness. The rebuttal testimony came from John Wolfe and Alan Gardiner, who both previously testified in this docket.

Before addressing Mr. Hahn's testimony, Mr. Wolfe provided an overview of the Settlement Agreement. He related that the Settlement Agreement describes the manner in which Cox will use its FSN to make I-Net service available throughout its Rhode Island cable system. Mr. Wolfe testified that the Settlement Agreement brings video and data transport capabilities to eligible building locations at Cox's expense. He explained that the video transport capability would be used to originate programming for distribution to residents or for closed loop distribution; and that the data transport capability would be available to municipal building locations, including schools, libraries, police and fire and town offices, as well as to State office locations. 160

Mr. Wolfe testified that the Settlement Agreement also establishes a process for (1) publicizing the availability of these services, (2) demonstrating the operation [of] these services and related equipment, (3) training in the use of these services and (4) reporting on the use of these services. He added that the

<sup>&</sup>lt;sup>159</sup> Id.

<sup>&</sup>lt;sup>160</sup> Cox Exh. 10, p. 2.

Settlement Agreement also establishes guidelines for Cox's staffing of its I-Net program, the handling of requests for service, contractual arrangements and dispute resolution.

Mr. Wolfe emphasized that the Settlement Agreement provides for video transport capability at no charge for one-way transport to the residential network and one-way transport between eligible building locations. He declared that there would also be no charge for 128 Kbps data transport service that can be used, at the option of the eligible location, for cable modem internet service or as a link for connection to one or more other eligible building locations. Mr. Wolfe indicated that with the latter option, known as a "VAN", Cox would provide a modem that Cox will own and maintain at its own expense. 161

Mr. Wolfe related that in addition to providing for 128 Kbps data transport at no charge, the Settlement Agreement further offers the same eligible users an opportunity to purchase higher speed data transport services at a discount of 20% off retail rates. Mr. Wolfe added that Cox has also responded to earlier public comments by including a credit program in the settlement agreement whereby an I-Net user may take a credit for a free data service and apply it toward the cost of a fee-based data service. He did identify a limitation, however, namely, that the credit would be subject to a limitation that the fee-based data service charge must not be less than 50% of the retail rate. Mr. Wolfe noted that

<sup>&</sup>lt;sup>161</sup> <u>Id</u>., p.3.

the credit for one location could be transferred for use at another location within a municipality. 162

Mr. Wolfe also reiterated that Cox has responded to public comments about user expense by modifying its original proposal to make the I-Net available in an analog format. He related that this approach reduces the costs that would otherwise be incurred by eligible users for the equipment needed in order to avail themselves of I-Net capabilities.<sup>163</sup>

Mr. Wolfe next discussed Mr. Hahn's testimony. He disagreed on the following issues:

- Mr. Wolfe stated that Mr. Hahn has incorrectly characterized this proceeding as a rulemaking proceeding. Mr. Wolfe related that a decision in this docket would not change the Rules. Rather, Mr. Wolfe contended that the instant petition has been filed in conformance with the "waiver" and the "alternative technological means" provisions contained in the existing Rules. 164
- Mr. Wolfe also disagreed with Mr. Hahn's assertion that a physically separate cable allows for a superior I-Net system. Mr. Wolfe deferred to Mr. Gardiner's rebuttal testimony on this issue. 165
- Mr. Wolfe generally criticized Mr. Hahn for offering "legal conclusions" regarding Cox's compliance with the Rules. He also disagreed with each of Mr. Hahn's assertions. Mr. Wolfe contended that because the Rules allow the

163 Id

<sup>&</sup>lt;sup>162</sup> Id.

 $<sup>164 \ \</sup>overline{\underline{Id}}., p.4.$ 

<sup>&</sup>lt;sup>165</sup> <u>Id</u>. pp.4-5.

Division to approve the use of an alternative technological means for making available the I-Net channel capacities, it is incorrect to assert that the Rules demand physically separate cable technology in I-Net applications. 166

- Similarly, Mr. Wolfe disagreed with Mr. Hahn's conclusion that the Settlement Agreement does not comply with the "standard installation" requirement set forth in the Rules. Mr. Wolfe responded that the Settlement Agreement provides for a standard installation of up to 150 feet free of charge, which Mr. Wolfe observed is consistent with Sections 7.3(a) and 8.6(a) of the Rules. Mr. Wolfe also contended that the standard installation provided for under the Settlement Agreement goes further than the Rules require by also including the installation and termination of internal wiring from the minimal point of entry (MPOE) to an outlet, existing wire closet, or other termination point located not more than 12 feet within the building. Mr. Wolfe contrasted its proposal to the provision in the Rules that make internal wiring for I-Net use the responsibility of the eligible user and not the cable operator. 167
- Mr. Wolfe further disagreed with Mr. Hahn's conclusion that the Rules require that cable operators construct an I-Net system and provide standard installations at their own expense. On this issue, Mr. Wolfe contended that "a review of the Cable Rules themselves as well as their history shows that the Cable Rules allow a cable operator to charge eligible institutions for their use of I-Net channel capacity". Mr. Wolfe observed that Section 11.2 of the Rules,

<sup>&</sup>lt;sup>166</sup> Id. p. 6.

<sup>&</sup>lt;sup>167</sup> <u>Id</u>., pp. 6-7.

<sup>&</sup>lt;sup>168</sup> Id., p. 7.

requires that cable operators' tariffs include detail on special installations, monthly service and other rates for institutional subscribers. He related that "implicit in this rule is the right of the cable operator to charge institutional subscribers for their use of I-Net channel capabilities". 169

Mr. Wolfe also maintained that prior Division and Court decisions support Cox's reading of the Rules. He cited an excerpt from the Division's January 30, 1981 "Statement Upon Adoption of Rules" wherein the Division stated that while no organization is forced to participate in the I-Net, '...all who elect to do so are advised to consider the costs and benefits of their participation.' Mr. Wolfe also opined that the Rules left open to cable operators to decide on who should pay for 'the operational or usage cost burden' of the I-Net. 171

Mr. Wolfe related that the Division's statements were later confirmed during the *Berkshire Cablevision* litigation, decided in 1983, in which an unsuccessful applicant for a cable certificate challenged the legality of the I-Net requirements of the Rules. He related that the applicant in the case argued that the I-Net requirements were unconstitutional because they took the property of cable operators without just compensation. Mr. Wolfe noted that the United States District Court disagreed and held that the I-Net Rule was not unconstitutional because cable operators could charge a reasonable fee for the use of I-Net facilities.<sup>172</sup>

<sup>169</sup> <u>Id</u>

<sup>&</sup>lt;sup>170</sup> See Advocacy Section Exhibit 9.

<sup>&</sup>lt;sup>171</sup> Id. pp. 7-8

<sup>&</sup>lt;sup>172</sup> Id., p. 8.

• Mr. Wolfe next criticized Mr. Hahn for his uncertainty regarding the start and length of the "ramp-up period" in the Settlement Agreement. Mr. Wolfe stated that the settlement agreement clearly defines the "ramp-up period" as 'the 180-day period immediately following the effective date of the Order' approving the Settlement Agreement. 173

• Mr. Wolfe next addressed Mr. Hahn's comments about why the Settlement Agreement does not identify the number of nodes in various service areas. He responded by opining that the Rules do not require cable operators to disclose the number or location of nodes in their service areas. Mr. Wolfe did state however, that Mr. Gardiner would explain how the Settlement Agreement assures that 'bandwidth contention problems' will be minimized.<sup>174</sup>

• Mr. Wolfe also addressed Mr. Hahn's expressed uncertainty about the 'monthly minimum installation requirement'. He related that there should be no confusion as this requirement is clearly described in the Settlement Agreement and that the number used represents a monthly minimum and not a monthly cap.<sup>175</sup>

• Mr. Wolfe also disagreed with Mr. Hahn's opinion that the Settlement Agreement fails to mention Division oversight of Cox's I-Net staffing. On this issue, Mr. Wolfe stated that under the Settlement Agreement Cox is required to employ a "Virtual B Network Coordinator" and 'provide a level of staffing that is

<sup>&</sup>lt;sup>173</sup> <u>Id</u>., p. 9.

<sup>&</sup>lt;sup>174</sup> Id.

<sup>&</sup>lt;sup>175</sup> <u>Id</u>.

necessary to effectively administer the Virtual B Network'. He contended that these commitments exceed the requirements under Section 14.9 of the Rules. 176

• Mr. Wolfe next took exception with Mr. Hahn's criticism that 'reasonable notice' is not defined in the Settlement Agreement. Mr. Wolfe testified that it is not necessary to define this phrase. He observed that "depending upon the type of equipment to be installed and maintained, the length of the 'reasonable notice' time frame might vary. Mr. Wolfe added that if eligible users believe that insufficient notice has been given by Cox in advance of deployment of equipment, they can raise the issue first with Cox and if necessary later with the Division. 177

• Mr. Wolfe stated that Mr. Gardiner would address Mr. Hahn's conclusion that a physically separate I-Net would outperform and be a superior system for the public than the FSN alternative adopted in the Settlement Agreement. However, Mr. Wolfe asserted that the Division should ignore this aspect of Mr. Hahn's testimony. Mr. Wolfe reasoned that Full Channel had several opportunities prior to the filing of the Settlement Agreement to present testimony on this issue. Further, Mr. Wolfe stated that the Division's focus should be on whether the Settlement Agreement is in the public interest and whether the proposed "alternative technological means" of providing I-Net services produces a result comparable to the I-Net service envisioned in Section 7.3 of the Rules. 178 Lastly, Mr. Wolfe stated that despite Mr. Hahn's failure to know of any

<sup>&</sup>lt;sup>176</sup> <u>Id</u>., pp. 9-10.

<sup>&</sup>lt;sup>177</sup> <u>Id</u>., p. 10.

<sup>&</sup>lt;sup>178</sup> Id., p. 11.

other FSN-type I-Net systems, the use of this technology in other states is already on the record in this docket.<sup>179</sup>

Mr. Alan Gardiner was proffered by Cox to address the technical portions of Mr. Hahn's testimony. He began his testimony by offering a comparison between the I-Net technology required under the Rules and the technology that Cox will use to provide I-Net capability and channel capacity under the Settlement Agreement. Mr. Gardiner explained that the Division's 1980 Rules contemplate an I-Net system completely constructed from two-way coaxial cable. He related that the coaxial network of the 1980's consisted of multiple amplifiers in cascade using a distributed powering system design. Mr. Gardiner testified that since that technology was all that was available at the time, I-Net users had to contend with typically noisy network quality due to the large number of amplifiers in cascade. He stated that "not only were noise levels high, the powering of so many amplifiers in series would make it difficult to troubleshoot and when an outage occurred, it affected a number of I-Net users due to the design". 180

Mr. Gardiner testified that in contrast, Cox's FSN I-Net is a hybrid network that uses a combination of fiber optics and traditional coaxial cable. He related that this technology allows the Cox network to be less susceptible to amplifier noise due to Cox's standard design that will only implement up to a maximum of seven active (powered) devices on a single node in its construction process. He explained that this design results in better picture quality, fewer outages and

<sup>179</sup> Id.

<sup>&</sup>lt;sup>180</sup> Cox Exh. 11, p. 2.

fewer customers affected overall.<sup>181</sup> Mr. Gardiner added that this design also allows I-Net users to benefit from some of Cox's existing network status monitoring equipment that alerts Cox when discrepancies are noted in the network and allows for a more pro-active approach to network maintenance.<sup>182</sup>

Mr. Gardiner next addressed Mr. Hahn's claim that a physically separate cable would provide superior channel capacities. He disagreed. Mr. Gardiner related that in addition to Cox's FSN's technical advantages, Cox's FSN is as capable and as flexible as a physically separate I-Net cable would be. Mr. Gardiner stated that the demonstration proffered earlier in this proceeding proved that the FSN produces a "comparable result". Mr. Gardiner also stated that Mr. Hahn's testimony ignores the substantial scheduling benefits afforded by the FSN's ubiquity. He explained that because the Cox's FSN I-Net covers the same areas and locations as Cox's residential network it will be ready to serve new or relocated eligible user locations anywhere the residential cable system goes. 184

Mr. Gardiner also commented on Mr. Hahn's perceived "bandwidth contention" problem. On this issue, Mr. Gardiner testified that Mr. Hahn has ignored the evidence already presented on this issue during the hearings. He related that Mr. Hahn's testimony requires the Division to assume that there will be a level of demand for I-Net utilization that exceeds the capacity of the network to supply those services. Mr. Gardiner derided this conclusion and called it

<sup>&</sup>lt;sup>181</sup> <u>Id</u>., p.3.

<sup>&</sup>lt;sup>182</sup> Id

<sup>&</sup>lt;sup>183</sup> <u>Id</u>., p. 3.

<sup>&</sup>lt;sup>184</sup> <u>Id</u>., pp. 3-4.

"highly speculative". Mr. Gardiner, relying on historical experience, contended that the opposite is in fact true. He maintained that I-Net use has been low, due in large measure to the public access channels made available by Cox. He related that municipalities have opted to use public access for live and taped broadcasts of municipal meetings and events to the residential network.<sup>185</sup> Mr. Gardiner testified that Mr. Hahn also ignores the fact that the 'contention problems' that he alleges are limited to those situations where two or more I-Net users ask to cablecast live their video programs through the same node at the same time. Mr. Gardiner opined that such a request would be rare, but that if it did occur, he testified that the Settlement Agreement addresses the matter by establishing a procedure for "cooperative scheduling". 186 Mr. Gardiner observed that such cooperative scheduling would also be necessary in an I-Net system that uses a physically separate cable. As an example, Mr. Gardiner related that cooperative scheduling would be needed in cases where two boards within a single municipal conduct and cablecast their respective meetings building wanted to simultaneously. He testified that Cox representatives would work with eligible users to address any potential scheduling issues. 187

In addition to "cooperative scheduling", Mr. Gardiner testified that the Settlement Agreement also provides technical approaches for resolving programming conflicts. He related that these include the temporary use of equipment to resolve the conflict, construction of direct fiber feeds and the

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<sup>&</sup>lt;sup>185</sup> Id., p. 4.

<sup>&</sup>lt;sup>186</sup> <u>Id</u>., pp. 4-5.

<sup>&</sup>lt;sup>187</sup> Id., p. 5.

splitting of a node. He noted that the deployment of CODECs at Cox's expense is also listed as an option for elimination of a specific programming conflict (<u>Id.</u>). In closing, Mr. Gardiner contended that given the speculative nature of Mr. Hahn's assumptions and the substantial attention paid to scheduling issues in the Settlement Agreement, the Division should find that the Settlement Agreement adequately covers the video programming scheduling concern raised by Mr. Hahn.<sup>188</sup>

Regarding Mr. Hahn's concern that the Settlement Agreement fails to identify the number of nodes in various service areas, Mr. Gardiner observed that the Rules do not require cable operators to disclose the number or location of nodes in their service areas.<sup>189</sup>

Mr. Gardiner also called Mr. Hahn's criticism that the Settlement Agreement "does not contain clearly set operational and technical standards for the I-Net" unfounded. Mr. Gardiner asserted that the Settlement Agreement's terms meet or exceed the Section 7.7 technical standards requirements under the Rules. He charged Mr. Hahn with trying to rewrite the Rules and trying to impose requirements upon Cox that are not imposed upon Full Channel. 190

In his final comments, Mr. Gardiner maintained that Mr. Hahn's testimony on technical matters does not afford a basis for the Division to disapprove the Settlement Agreement. He contended that Cox has already demonstrated that its FSN technology will provide adequate I-Net channel capacity and capability to I-

<sup>189</sup> <u>Id</u>., pp. 5-6.

<sup>&</sup>lt;sup>188</sup> Id.

<sup>&</sup>lt;sup>190</sup> <u>Id</u>., p. 6.

Net users. He also observed that data transport and cable modem capabilities of the FSN have already been demonstrated in the State's commercial markets. Lastly, Mr. Gardiner emphasized that the high-speed data services that the Settlement Agreement provides for are not available at all over the 1980 technology that is covered under the Rules. 191

# XV. THE ADVOCACY SECTION'S REBUTTAL CASE

The Advocacy Section recalled Mr. Patrick Mahoney to offer surrebuttal testimony. Mr. Mahoney concluded that Mr. Hahn's testimony about "bandwidth contention" problems contains assumptions that render it an inaccurate characterization of the proposed Virtual B Network.

Mr. Mahoney related that Mr. Hahn's statement assumes that a level of demand for Virtual B Network services will immediately exceed the capacity of the network to supply those services. Regarding this assumption, Mr. Mahoney echoed Mr. Gardiner's comments about historical under-utilization and noted that a "basic level of demand is not atypical of I-Net usage in other parts of the country with which I am familiar". He opined that given this historical level of demand, he could not agree with Mr. Hahn's prediction that Cox would have to 'continually reassign, bi-directional bandwidths, on a node-by-node basis to accommodate' existing or even anticipated I-Net user needs under the proposed Virtual B Network. 193

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<sup>&</sup>lt;sup>191</sup> Id., p. 7.

<sup>&</sup>lt;sup>192</sup> Advocacy Section Exh. 11, p. 2.

<sup>&</sup>lt;sup>193</sup> Id.

Mr. Mahoney further opined that Cox's existing multiplexing and digital compression techniques will enable it to avoid 'contention problems' downstream, between the node and the user, and upstream, between the node and the headend. 194

Mr. Mahoney also vehemently disagreed with Mr. Hahn's claim that a separate B-cable I-Net system can 'outperform' is 'superior to' and is 'more capable' than the proposed integrated Virtual B Network. He opined that given existing cable network technology, the question of whether an I-Net is separate or integrated is not relevant to the network's ability to perform. Instead, Mr. Mahoney related that the performance of an I-Net principally hinges on the magnitude of the demand for I-Net services, the capacity of the network to meet the demand, and the dedication of the cable operator to provide those services. 195

Mr. Mahoney used the same response regarding Mr. Hahn's claim that a separate I-Net is 'simpler to operate' than the proposed Virtual B Network. He related that whether an I-Net is integrated or separate again is irrelevant to the operational complexity or simplicity of the network. Mr. Mahoney testified that an I-Net's operational simplicity from the user's perspective is largely based upon the equipment that the user must operate to utilize an I-Net service. He related that since a user will transmit a signal upstream via an analog modulator and receive downstream signals via a digital set-top box and monitor, the proposed

<sup>&</sup>lt;sup>194</sup> <u>Id</u>. <sup>195</sup> <u>Id</u>., p. 3.

Virtual B Network is no more complex to operate than a separate cable type I-Net. 196

Mr. Mahoney also disagreed with Mr. Hahn's conclusion that a separate I-Net uses technologies that are 'more proven'. He testified that the Virtual B Network uses technologies that are in use today in Cox's Rhode Island residential cable system. He called these technologies "proven in every sense of the word". 197

Mr. Mahoney additionally disagreed with Mr. Hahn's statement that cost is the only factor behind Cox's proposal to use a Virtual B Network to provide I-Net services. He related that while cost is an important factor, a Virtual B Network I-Net makes sense because it will be ubiquitous. Mr. Mahoney observed that Cox's FSN can "immediately scale to much larger sets of institutional users than a separately constructed I-Net". He also noted that the Virtual B Network proposal contains a free, high-speed Internet service component, with the option to purchase higher speeds at a substantial discount. He related that these are benefits that the user typically would not have received under the separately constructed I-Net envisioned under the Rules. 199

Mr. Mahoney also disagreed with Mr. Hahn's opinion that a separate B-cable I-Net is superior in terms of the 'technology objectives' of the I-Net user.

Mr. Mahoney explained that the Virtual B Network provides a broader array of services (video and data) via technologies that may run the gamut of

<sup>&</sup>lt;sup>196</sup> Id.

<sup>&</sup>lt;sup>197</sup> <u>Id</u>., p. 4.

<sup>&</sup>lt;sup>198</sup> Id.

<sup>&</sup>lt;sup>199</sup> <u>Id</u>., p. 5.

sophistication. He added that the Virtual B Network further provides these services to users that may not have been entitled to receive I-Net services under the separate facility I-Net model. Accordingly, Mr. Mahoney concluded that the proposed Virtual B Network affords users with the "widest choice of methods for accomplishing... [their] objectives". 200

Mr. Mahoney next echoed Mr. Gardiner's testimony about the use of comparable integrated functionality I-Net systems elsewhere in the country. He related that while it may be true that Mr. Hahn is not aware of any others, others exist currently in Arizona, California and Nevada.<sup>201</sup>

Regarding the issue of whether Cox may charge I-Net users for data services and non-standard installations, Mr. Mahoney deferred to Cox's references to various sections in the Rules. Mr. Mahoney did state, however, that the Settlement Agreement appears to offer more benefits than the Rules require. For example, he observed that under the Settlement Agreement municipal and educational users may obtain free high-speed Internet service and discounted prices on Internet service at speeds in excess of 128 Kbps.<sup>202</sup>

Mr. Mahoney also questioned Mr. Hahn's confusion over the meaning of the terms 'Ramp-up Period' and 'Minimum Monthly Installation Requirement". He contended that these terms are clearly defined in the Settlement Agreement. He also explained that the parties specifically decided not to designate a specific 'DOCSIS' standard to ensure that both present and future DOCSIS standards

<sup>&</sup>lt;sup>200</sup> Id., pp. 5-6.

<sup>&</sup>lt;sup>201</sup> <u>Id</u>., p. 6.

<sup>&</sup>lt;sup>202</sup> Id.

were covered by the term. Mr. Mahoney also related that it would be reasonable to use the 10-day notice discussed in R.I.G.L. §39-4-5 as a proxy for the term 'Reasonable Notice' as used in the Settlement Agreement.<sup>203</sup>

Mr. Mahoney next disagreed with Mr. Hahn's recommendation that quantifiable quality of service standards be included in the Settlement Agreement. He explained that "one of the other non-cost benefits of an integrated I-Net is that the high quality of service demanded by the cable operator's residential customers, by necessity, carries through to its I-Net operations. Thus, the need for maintaining the type of quality of service information proposed by Mr. Hahn is largely eliminated". <sup>204</sup>

In his concluding comments, Mr. Mahoney opined that "the Virtual B Network Settlement Agreement is a fair and reasonable resolution of an outstanding disagreement between the Division and Cox". <sup>205</sup> He further concluded that the proposed Virtual B Network could meet the current and future demands for video and data services in Rhode Island. <sup>206</sup>

# XVI. PUBLIC COMMENTS ON SETTLEMENT AGREEMENT

Fourteen individuals appeared at the public hearing conducted on December 19, 2002 to offer comment on the Settlement Agreement filed by Cox and the Advocacy Section.<sup>207</sup> These individuals were identified as Mr. Seymour Glantz, Vice-President and Secretary, Service Area 5 Citizen's Advisory

 $^{204}$   $\overline{\underline{\mathrm{Id}}}$ .

<sup>&</sup>lt;sup>203</sup> <u>Id</u>., p. 7

<sup>&</sup>lt;sup>205</sup> <u>Id</u>., pp. 7-8.

<sup>&</sup>lt;sup>206</sup> Id., p. 8.

<sup>&</sup>lt;sup>207</sup> The Division published a special notice of this public hearing in the Providence Journal on December 4, 2002.

Committee; Mr. George Donovan, Chairman, Service Area 4 Citizen's Advisory Committee; Mr. Cliff Wood, a spokesperson for then Mayor-Elect David Cicilline of Providence; Mr. William J. Fiske, Coordinator of Instructional Technology, Rhode Island Department of Education<sup>208</sup>; Ms. Jeanie Spinoza, Director of Telecommunications for the State of Rhode Island; Mr. Harold Demopulos, a member of the Service Area 5 Citizen's Advisory Committee; Mr. George K. Loftus, Executive Director, Ocean State Higher Education, Economic Development & Administrative Network<sup>209</sup>; Mr. Dan Lemois, Network Information Technology Manager, town of Cumberland; Mr. E. Craig Beausoleil, Assistant Chief, North Smithfield Fire Department; Mr. Arthur Amdonca, Technical Services Expediter, Providence School Department; Mr. Thomas Chinigo, Chairman, Service Area 9 Citizen's Advisory Committee; Thomas Rambarker, Technology Director, Burrillville School Department; Mr. John Gallishaw, Director of Technology, Woonsocket School Department; and Mr. Peter Bennett, Court and Libraries Automated Network.

The tenor of the public comments concerning the Settlement Agreement were as follows:

• That a separate B-cable I-Net will avoid "cumbersome technological or bureaucratic encumbrances".

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<sup>&</sup>lt;sup>208</sup> Mr. Fiske also offered earlier comments in this docket regarding Cox's petition and demonstration, supra.

Mr. Loftus also offered earlier comments in this docket regarding Cox's petition and demonstration, supra.

- That to use the virtual network will require too much direct involvement by Cox.
- That the Rules give the impression that I-Net users should receive free service.
- The Settlement Agreement will save Cox the expense of building a separate I-Net but offers nothing in return for I-Net users.
- The demonstration of Cox's proposed I-Net service raised concerns regarding broadcast quality.
- That the virtual I-Net services being proposed by Cox are of little or no value to the K-12 education segment of the I-Net eligible users. Claiming that the proposed services already exist "free of charge" in most schools, it was suggested that Cox use its "near monopoly" status and the millions of dollars of funds it has likely saved over the years by not fully implementing the separate B-cable I-Net required under the Rules, to create a pool of funds that could be used to provide I-Net users the resources they need.
- Because the State is extending its communications network capacity to municipalities, schools, libraries, hospital and first responders, the State's Telecommunications Director suggests that the capabilities of Cox's FSN, which includes IP-based data transport and video in the context of a closed private network, could provide crucial links in the infrastructure being built by the State. Consequently, the State's Telecommunications Director urged the Division to compel Cox to

provide its full panoply of state-of-the-art FSN services to State institutions at no charge in exchange for not compelling Cox to construct the separate B-cable I-Net contemplated under the Rules.

- That because Cox is not required to pay franchise fees in Rhode Island,
   all I-Net services should be provided at no expense to eligible I-Net users.
- The Settlement Agreement should not establish a set technology to use because technologies change dramatically over time. Instead, the Division should require Cox to provide services that keep pace with changes in technology and the changing needs of I-Net users.
- That the "voucher" program identified in the Settlement Agreement is too restrictive in that I-Net users will "have to pay 50 percent of the value". Further as it relates to educational institutions, the discounts "are not extraordinary" and in fact are "less than normal educational discounts in the marketplace today".
- Several towns currently using Cox's internet, e-mail and virtual network services expressed complete satisfaction with their ability to utilize Cox's FSN to transport data between municipal buildings. They supported the Settlement Agreement.
- That Cox's proposal does not provide a "comprehensive solution" for the needs of the educational community.
- One Citizen's Advisory Committee Chairman questioned whether a need for I-Net services has been demonstrated. He wondered why so

many individuals were looking for greater I-Net services than those required under the Rules when history has reflected so little demand for I-Net services in Rhode Island. He cautioned that the expenses associated with providing these "free" additional services would need to be borne by Cox's "paying" residential cable subscribers. He added that before we pass any additional costs onto residential subscribers or further restrict channel capacity and bandwidth, the Division should identify and survey the potential users of these I-Net services.

# XVII. FULL CHANNEL'S FINAL POSITION

Full Channel filed a closing brief in this docket on January 28, 2003. Full Channel's final position in this docket has been summarized below:

- Full Channel remains steadfast in its assertion that granting Cox the relief it seeks would be tantamount to the Division improperly changing the Rules. Full Channel contends that "to change the rule or grant a waiver would not be in the public's interest"; and would further be a violation of R.I.G.L. 39-19-3.<sup>210</sup>
- Full Channel also continues to maintain that "(1) Cox never followed the rules (Section 7.3) when it took over each of the other service areas over the past several years; (2) Cox was not in compliance when it filed its petition for waiver; (3) Cox remains non compliant and the waiver granted in other docket (i.e. compliance certificate docket) was improper and beyond the authority of the

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<sup>&</sup>lt;sup>210</sup> Full Channel's Post-Memorandum, p. 1.

Administrator.... Therefore, Cox should not even be [sic] allowed to file such a self-serving petition..."211

- Full Channel also challenges the procedure followed by the Division in this proceeding. Full Channel asserts that in order to effectuate a "rule change" the Division was required to satisfy a more rigorous notification regimen.<sup>212</sup>
- Full Channel also relied upon the following observations to further its claims of procedural and substantive deficiencies in this docket: (1) that five public hearings provided the public with an insufficient opportunity to comment in this docket; (2) that Cox failed to prove that its proposed "technology or functionality could perform or out perform Section 7.3's required separate B-cable"213; (3) that Cox has failed to meet the requisite burden of proof to warrant a waiver of the separate B-cable requirement. Specifically, Cox has not proven that constructing a separate B-cable "would endanger the economic viability of the system"214; (4) that Cox's statement that there has been little demand for an I-Net fails to consider the lack of related promotional efforts by Cox<sup>215</sup>; (5) that the term "functionality" has no meaning<sup>216</sup>; (6) that Cox's witnesses were often "evasive"<sup>217</sup>; (7) that Cox's witnesses were not as knowledgeable or as persuasive as Full Channel's witness<sup>218</sup>; (8) that the Settlement Agreement contains a

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<sup>&</sup>lt;sup>211</sup> <u>Id</u>., p. 2.

<sup>&</sup>lt;sup>212</sup> Id.

<sup>&</sup>lt;sup>213</sup> <u>Id</u>., pp. 3-5.

<sup>&</sup>lt;sup>214</sup> Id., p. 6, citing Section 7.3(b) of the Rules.

<sup>&</sup>lt;sup>215</sup> Id., pp. 7-8.

<sup>&</sup>lt;sup>216</sup> Id., pp. 9-12.

<sup>&</sup>lt;sup>217</sup> <u>Id</u>., pp. 12-13.

<sup>&</sup>lt;sup>218</sup> <u>Id</u>., pp. 12-20.

number of ambiguities<sup>219</sup>; and (9) the public testimony offered in this docket does not reflect support for the proposed I-Net service.<sup>220</sup>

#### XVIII. ATTORNEY GENERAL'S FINAL POSITION

The Attorney General filed a closing brief in this docket on January 24, 2003. The Attorney General's final position in this docket has been summarized below:

- The Attorney General does not believe that Cox has satisfied the requirements of Section 7.1(b) of the Rules for granting waivers of the requirements of Chapter 7 of the Rules.<sup>221</sup> The Attorney General bases this opinion on its conclusion that Cox has failed to make a convincing showing that strict compliance with the upstream and/or downstream television channel requirements of an I-Net would endanger the economic viability of its system.<sup>222</sup>
- The Attorney General also does not believe that Cox has established that the FSN is an acceptable alternative technology within the meaning of Section 7.3 of the Rules.<sup>223</sup> The Attorney General bases this opinion on its conclusion that Cox's FSN does not yield an upstream channel capacity from each I-Net user that is comparable to 12 television channels and a downstream channel capacity to each I-Net user that is comparable to 21 television channels.<sup>224</sup>
  - The Attorney General observes that "based on the evidence currently of

<sup>&</sup>lt;sup>219</sup> Id., pp. 18-19.

<sup>&</sup>lt;sup>220</sup> <u>Id.</u>, pp. 21-23.

<sup>&</sup>lt;sup>221</sup> Attorney General Closing Brief, p. 2.

<sup>&</sup>lt;sup>222</sup> Id., pp. 6-10 and 21-38.

<sup>&</sup>lt;sup>223</sup> Id.

<sup>&</sup>lt;sup>224</sup> <u>Id.</u>, pp. 15-21.

record...the Settlement Agreement...has significant merit and is worth preserving. Therefore, the Attorney General recommends that the hearings in this docket be reopened and that Cox be afforded further opportunity to present such evidence as would satisfy Section 7.1(b) of the Rules".<sup>225</sup>

### XIX. COX'S FINAL POSITION

Cox filed a closing brief in this docket on January 27, 2003 and a reply brief on January 31, 2003. In its brief, Cox contends that the Settlement Agreement contains comprehensive I-Net requirements that meet or exceed the obligations that would be imposed upon Cox under the Division's existing Rules.<sup>226</sup> Cox bases this opinion on the following conclusions:

- That the Settlement Agreement expressly commits Cox to making available network facilities that are technically capable of providing the upstream and downstream channel capacity specified under Section 7.3 of the Rules.<sup>227</sup>
- That the Settlement Agreement expressly obligates Cox to provide one-way video transport services at no charge and free 128 Kbps data transport services, which may be either cable modem service or point-to-point service that enables the user to connect to multiple locations within a community. Cox observes that these obligations do not exist under the Rules.<sup>228</sup>

<sup>&</sup>lt;sup>225</sup> <u>Id.</u>, pp. 2-3 and 38.

<sup>&</sup>lt;sup>226</sup> Cox Initial Brief, p. 1.

<sup>&</sup>lt;sup>227</sup> Id., pp. 8-9.

<sup>&</sup>lt;sup>228</sup> <u>Id.</u>, p. 9.

 That the Settlement Agreement extends I-Net capabilities to Stateowned building locations, thus expanding the pool of eligible institutions beyond the level required under the Rules.<sup>229</sup>

Cox additionally notes that the Settlement Agreement reflects substantial modifications to its original proposal that resolve concerns expressed by members of the public about the affordability of the equipment needed to utilize the proposed I-Net services and the capability to originate simultaneous live broadcasts from multiple locations within a single node.<sup>230</sup>

### XX. THE ADVOCACY SECTION'S FINAL POSITION

The Advocacy Section filed a closing brief in this docket on January 24, 2003. In its brief, the Advocacy Section maintained that many of the concerns voiced by the public and Full Channel "are divorced from two realities". The Advocacy Section identified these two realities as (1) the limitations contained in the Rules and in the federal law that restrict the Division's ability to 'compel' cable operators to provide free, high-speed internet service; and (2) the fact that demand for I-Net video and internet service in Rhode Island has been historically small. The Advocacy Section maintains that "when these realities are factored into the decision-making process, the Settlement Agreement strikes the proper balance between the interest of ratepayers to obtain affordable internet and

<sup>&</sup>lt;sup>229</sup> <u>Id.</u>, pp. 9-10.

<sup>&</sup>lt;sup>230</sup> <u>Id.</u>, pp. 1-2.

<sup>&</sup>lt;sup>231</sup> Advocacy Section Post-Hearing Memorandum, p.1.

cable television service and I-Net users' desire to obtain free, high-speed internet service". <sup>232</sup>

#### XXI. FINDINGS

The Petitioner and the several intervening parties that participated in the instant docket required approximately 27 months to prosecute their respective claims and positions. During this lengthy proceeding, the Division has compiled an extremely voluminous record of evidence, proffered by several actively participating parties and by eighteen articulate and well-versed individuals who offered public comments on Cox's petition and/or Cox's demonstration of its proposed alternative I-Net technology and/or on the Settlement Agreement that was subsequently submitted in this docket. All in all, the Division was quite impressed with, and appreciative of, the high level of public knowledge and participation in this most abstruse of cable television-related matters.

During the course of its examination of the evidence and arguments presented in this docket, the Division identified a number of issues on which findings of fact and law were required. The issues and related findings are set forth below.

A. Whether Cox's Existing I-Net Arrangements Comply with Section 7.3 of the Rules?

Cox has asserted from the beginning of this proceeding that its current "I-Net arrangements", or specifically the "advanced broadband platform" provided by its FSN, fully satisfies the "physically separate" B-cable requirement

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<sup>&</sup>lt;sup>232</sup> <u>Id.</u>, pp. 1-9.

mandated in Section 7.3(a) of the Rules.<sup>233</sup> Cox bases this contention on two factors. First, Cox maintains that its FSN provides an alternative technological means to provide the I-Net video functionality required under Section 7.3 of the Rules. Cox relies on language contained in Section 7.3(d) of the Rules, which allows a cable television company, with Division approval, to use any "alternative technological means" that provides the "channel capacities required...and...which will yield a comparable result". Secondly, Cox maintains that it has already effectively received Division approval for its current I-Net arrangements, by virtue of recent orders issued by the Division in which Cox was found to be in compliance with the Division's Rules.<sup>234</sup>

The Division has considered the arguments proffered by Cox on this issue, and although well reasoned, the fact remains that Section 7.3(a) of the Rules explicitly requires that all cable television companies construct an I-Net that is "physically separate" from the residential network. While Cox has complied with, or has waivers for, this explicit requirement in some of its Services Areas, the vast majority of its cable system lacks the dual-network architecture required under this Rule.

With respect to Cox's claim that the Division has tacitly approved its I-Net arrangements in prior dockets, the Division finds insufficient support for this claim. The docket decisions on which Cox bases this claim were decisions involving the transfer of three CATV certificates between 1996 and 1999 wherein

<sup>233</sup> Cox Exh. 3, p.3.

<sup>&</sup>lt;sup>234</sup> Id., p. 4.

Cox was the transferee. Despite Cox's claim, the Division finds that these decisions simply declared Cox in general compliance with the transfer criteria established in Rhode Island General Laws, Section 39-19-4 and Section 4.1 of the Rules.

One of these criteria requires the prospective transferee to prove that it "is...able...to conform to the rules and regulations of the division" and/or "is willing and able to comply with these rules". 235 The finding is required to ensure that the prospective transferee is "willing" and "able" to comply with the Division's Rules, a forecast of future compliance not existing compliance; which would stand to reason if one recognizes that transferees are not assumed or required to have contemporaneous authority in another Rhode Island CATV Service Area.

Unfortunately, in the three decisions cited by Cox, the hearing officer inaccurately stated the aforementioned criterion, giving the impression that current compliance of the Rules was required under the law. The same error does not appear in all Division "transfer" decisions.<sup>236</sup> Nonetheless, it is clear that in the three previously issued Division decisions cited by Cox, the hearing officer limited his inquiry and findings to the narrow issue of certificate transfer propriety. It would be unreasonable to extract any extraneous meaning from those decisions.

In conclusion, except in those Service Areas where Cox has either

<sup>&</sup>lt;sup>235</sup> See R.I.G.L. §39-19-4; and Sections 4.1 and 3.3(d) of the Rules.

<sup>&</sup>lt;sup>236</sup> See Order No. 15914, issued on July 16, 1999.

constructed a B-cable I-Net or has been granted an appropriate waiver from the Division, the Division must find that Cox's existing I-Net arrangements do not comply with the "physically separate" I-Net mandate contained in Section 7.3(a) of the Rules.

## B. <u>Should the Division Grant Cox a Waiver from the "Physically Separate"</u> <u>I-Net Requirements of Section 7.3(a) of the Rules?</u>

In its petition, Cox conveys the following statement:

To the extent that the Division believes that a waiver of a portion of Section 7.3(a) may be necessary in order for I-Net functionality to be made available over an advanced broadband network, and in order to put to rest any issue of Cox's compliance with Section 7.3 of the Rules, Cox has, in the alternative, requested a waiver from a portion of Section 7.3(a) for approval to provide I-Net functionality required under Section 7.3 through its advanced broadband infrastructure rather than through a physically separate network.<sup>237</sup>

Regarding this statement, the Division does find that a waiver of that portion of Section 7.3(a) that mandates a "physically separate" I-Net is necessary in order for I-Net functionality to be made available over Cox's advanced broadband network.

### 1. Which waiver standard applies?

The Division's Rules contain provisions that afford cable television companies the opportunity to seek waivers from any of the regulatory requirements contained in the Rules. The relevant "waiver" provisions are found at Section 1.12 and Section 7.1(b) of the Rules, which are reproduced in pertinent part below:

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<sup>&</sup>lt;sup>237</sup> Cox Exh. 3, p. 4.

### Section 1.12 Petition for Waiver

- (a) On petition by a CATV company the Administrator may waive any provision of these rules relating to CATV systems....
- (d) The Administrator, after public hearing, shall determine on the basis of the petition, written comments, and testimony received, whether the public interest would be served by the granting, in whole or in part, or by denial of the request.

### Section 7.1 Compliance with design standards; waivers

- (a) All CATV systems constructed and operated within this state shall conform to the minimum design criteria set forth in this chapter.
- (b) Waivers of specific provisions of this chapter may be granted by the Administrator only upon a showing that strict compliance would endanger the economic viability of the system.

Cox has petitioned the Division to consider its waiver request in the context of a Section 1.12 waiver standard, namely, a standard that requires a "public interest" analysis.<sup>238</sup>

Conversely, the Advocacy Section, Full Channel and the Attorney General all contend that any waivers involving the provisions of Section 7.3 of the Rules, which includes the regulatory requirement for a "physically separate" I-Net, must be decided using the Section 7.1(b) standard, namely, a standard that requires an analysis to determine whether compelling Cox to construct a B-cable-type I-Net would "endanger the economic viability of the system".<sup>239</sup>

The Division has considered the arguments made by the parties relative to the question of which of the two waiver standards noted above is the appropriate waiver standard to be used in this matter, and finds that both standards apply.

<sup>&</sup>lt;sup>238</sup> Cox Exh. 3, pp. 5-9; Cox Exh. 2, pp. 19-20.

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<sup>&</sup>lt;sup>239</sup> Advocacy Section Exh.1, p. 3; Full Channel Post Memorandum, p. 6; and Attorney General Closing Brief, p. 6-8.

It has been long recognized in the law that whenever a "general" provision shall be in conflict with a "special" provision relating to the same or to a similar subject, the two provisions shall be construed, if possible, so that effect may be given to both; and in those cases, if effect cannot be given to both, the special provision shall prevail and shall be construed as an exception to the general provision.<sup>240</sup> In short, the Division finds that in this matter both waiver standards can be construed so as to give effect to each standard. Therefore, before the Division may grant Cox a waiver from the "physically separate" network requirement of Section 7.3(a) of the Rules, Cox must prove to the Division that (1) constructing a B-cable-type I-Net in all of its Service Areas would "endanger the economic viability of its cable system, and (2) that a waiver from this requirement would be in the public interest.

## 2. <u>Would compelling Cox to build a physically separate I-Net</u> endanger the economic viability of Cox's cable system?

The Attorney General and Full Channel both contend that Cox has failed to demonstrate that the economic viability of its cable system would suffer from the construction of a B-cable I-Net in its many authorized Service Areas.<sup>241</sup> Naturally, Cox offers a different opinion on this issue.

The Division recognizes that since it first began doing business in Rhode Island, in 1981, Cox has gone from providing cable television services in a single Service Area to providing cable television services in eleven Service Areas. Over this 22-year timeframe, Cox has either constructed its own B-cable-type I-Nets (in

<sup>&</sup>lt;sup>240</sup> See generally, R.I.G.L. §43-3-26 and related case law.

<sup>&</sup>lt;sup>241</sup> Full Channel Post Memorandum, pp. 6-7; Attorney General Closing Brief, pp. 26-38.

CATV Service Areas 3 and 13), or has acquired the I-Net "arrangements" (including related waivers) of other CATV companies through certificate transfer proceedings (in CATV Service Areas 1, 2, 4, 7, 8, 9 and 10). It would also appear from the record that despite the availability and/or the potential availability of these I-Net systems, eligible I-Net institutions expressed virtually no interest for I-Net services. Indeed, as of 1999, Cox was providing I-Net services to only a small number of institutions in only seven communities.<sup>242</sup> The record additionally supports a conclusion that Cox never refused or failed to provide I-Net services when requested to do so by a prospective I-Net user.

As a consequence of this perceived lack of I-Net interest, coupled with the ever-developing advances in cable television technologies, Cox opted to integrate its residential and I-Net networks into a unified FSN, now capable of delivering enhanced video and data transport services to both classes of end users. The expense associated with this integration and upgrade has exceeded \$300 million.

The issue now before the Division is whether Cox should be compelled to reactivate and/or construct a ubiquitous B-cable I-Net along side its new \$300-plus million FSN. Or, alternatively, whether Cox has proven that the economic viability of its cable system would be endangered by such an order by the Division.

The Attorney General and Full Channel have interpreted "economic viability" to inflexibly mean that Cox must provide a detailed cost analysis to prove that the cost of building a physically separate I-Net will exceed the revenues

<sup>&</sup>lt;sup>242</sup> Cox Exh. 1, Attachment 1, Part A. 3.

to be realized from providing I-Net services and that a physically separate I-Net "might even drag the existing residential system under with it".<sup>243</sup> The Division cannot accept this overly strict interpretation.

The Division has approved I-Net related waivers in the past. Such waivers were granted after a finding that the demand for such services was not clearly demonstrated and that the perceived minimal need for such services did not warrant the related construction expense.<sup>244</sup> Detailed cost/benefit analyses were never required.

There are two obvious facts to be gleaned from this record. First, that the cost to construct a B-cable I-Net continues to be a very expensive proposition. For Cox's statewide cable system, the cost today would range between \$4 million and \$20 million. Common sense also suggests that there would be significant expense associated with the maintenance and operation of a physically separate I-Net infrastructure. Secondly, the exigency for the type of I-Net services contemplated in the Rules (last revised in 1983) has historically been and remains extremely minimal. Notably, in view of the two-way high-speed data transport services available today, the demand for the one-way video-only services required under Section 7.3 of the Rules has never been less significant.

<sup>&</sup>lt;sup>243</sup> Attorney General Closing Brief, p.28.

<sup>&</sup>lt;sup>244</sup> See Docket Nos. 1057 (1986) and D-87-4C (1987).

 $<sup>^{245}</sup>$  This range was developed on the record through the testimonies of Messrs. Davis and Mahoney.

If Cox were directed to build the physically separate I-Net mandated under Section 7.3(a) of the Rules, the limited capacity and the typically "noisy" quality<sup>246</sup> of such a 1980's vintage I-Net would surely not attract much attention.<sup>247</sup> However, the dollars spent on such a boondoggle might. For the whole of Cox's subscriber base may ultimately foot the bill for these construction costs, <u>infra</u>, and because these millions of dollars could otherwise be used by Cox to further enhance the various digital video and high-speed data transmission services that are currently very popular and in high demand.

Mr. Mahoney's comments on the interrelationship between public demand and cost for an I-Net were persuasive. He testified that to "...require the duplication of facilities in light of this unclear demand and the extraordinary construction, operating and maintenance expenses, in my opinion, would be extremely wasteful of ratepayer and consumer funds.<sup>248</sup> Mr. Mahoney further opined that utilizing Cox's existing facilities to provide "...virtually the same degree of video service and even more internet access service than has been historically utilized by institutional users makes eminent sense from a cost/benefit perspective.<sup>249</sup>

Interestingly, no one appeared before the Division, neither a party nor a member of the public, to express genuine support or a demand for the actual

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<sup>&</sup>lt;sup>246</sup> Mr. Gardiner testified that the two-way coaxial cable used in this 1980's technology required multiple amplifiers that created "noise" on the network. He added that the many amplifiers, that had to installed "in series", also made troubleshooting difficult when outages occurred.

<sup>&</sup>lt;sup>247</sup> Regrettably the Rules were last updated in 1983. However, the Division is currently in the process of updating the Rules.

<sup>&</sup>lt;sup>248</sup> Advocacy Section Exh. 2, p. 10.

<sup>&</sup>lt;sup>249</sup> Id.

one-way video I-Net services described in Section 7.3 of the Rules. Instead, members of the public generally spoke in favor of Cox providing free user equipment and/or greater high-speed data transmission services to eligible institutions at no charge. Full Channel demanded that Cox build a B-cable I-Net principally because Full Channel had to pay for one in the 1980's and that it would be unfair to Full Channel to allow Cox to avoid the same expense. In view of this continued apparent apathy for the outdated and limited I-Net design contemplated under Section 7.3 of the Rules, the Division must conclude that a detailed cost analysis would be superfluous.

Moreover, in determining whether the economic viability of Cox's cable system would be endangered by the obligatory construction of a physically separate I-Net, the Division must also consider whether this requirement would significantly impair Cox's competitive position vis a vis the services provided by satellite-based video service providers. The Division is mindful that satellite-based video service providers did not exist as realistic competitors when Section 7.3 of the Rules was promulgated. The Division also recognizes that satellite-based video service providers are not presently required to provide any form of I-Net services to their subscribers, or for that matter, any public, educational and governmental channel capacity or public access studio facilities. Satellite-based video service providers are similarly not required to maintain local business offices; satisfy State and local franchising, insurance, customer service, permitting and safety requirements; or have their operations subject to the oversight of a regulatory agency and advisory bodies. As a result, satellite-based

video service providers don't have to factor the expenses associated with providing these additional services and satisfying these additional requirements into the rates they charge their subscribers.

In the final analysis, the Division finds that the economic viability of Cox's cable system would be <u>de facto</u> endangered if Cox were held duty-bound to construct and maintain a physically separate B-cable I-Net along side its current state-of-the-art FSN.

- 3. <u>Would granting Cox a waiver from Section 7.3(a)'s requirement</u> for a physically separate I-Net be in the public interest?
  - a. <u>Does Cox's virtual B-cable FSN constitute an alternative technological means for providing the channel capacities required under the Rules?</u>

Section 7.3(d) of the Rules provides that:

"alternative technological means of providing the channel capacities required...herein which will yield a comparable result may be used, subject to the approval of the Administrator".

In this case, Cox asserts that its virtual B-cable FSN constitutes an alternative technological means for providing the channel capacities required under the Rules. However, Full Channel, the Attorney General and some members of the public disagree.

At the heart of this issue, is a disagreement about whether Cox's FSN-based I-Net is able to provide the minimum upstream (12) and minimum downstream (21) channel capacities that are required under the Rules,<sup>250</sup> and whether the "alternative" technology yields "a comparable result".

<sup>&</sup>lt;sup>250</sup> Rule 7.3(c) and (d).

Interpretation of the meaning of what the Rule actually requires has become a key factor in this discussion. The Attorney General has examined these minimum channel capacity issues (12 upstream and 21 downstream) in the context of their application to all I-Net users, but on an individualized basis. In short, the Attorney General argues that Cox has failed to show that its FSN can provide the minimum channel capacities to "each I-Net user".

Cox calls the Attorney General's interpretation "a clear misreading of Section 7.3".<sup>251</sup> Cox emphasizes that Section 7.3 provides that an I-Net 'shall at a minimum be technically capable of providing the equivalent of twenty-one (21) downstream television channels...to all institutional users' (emphasis added) and 'shall be technically capable of providing the equivalent of twelve (12) upstream television channels...from all institutional users' (emphasis added).<sup>252</sup> Cox insists that the Rules do not require a cable television company to have the technical capability of providing all of this downstream and upstream channel capacity to each and every individual eligible I-Net user. The Division agrees.

The Division does not accept the Attorney General's argument that the Rules demand that each cable television company must be able to dedicate its entire upstream and downstream I-Net capacity for a Service Area to each and every eligible user. Undoubtedly, such an interpretation would be problematical where multiple I-Net users were inclined to each utilize the system's full capacity at the same time. The Division therefore must find that the channel capacities identified in the Rules apply to a Service Area as a whole.

<sup>251</sup> Cox Reply Brief, p. 3.

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Looking at each Service Area as a whole, the Division finds that Cox's FSN does provide adequate upstream and downstream I-Net channel capacity. Regarding upstream channel capacity, the Division agrees with Mr. Kulberg's assessment that because Cox would provide one upstream channel per node and because a Service Area could have hundreds of nodes, Cox's proposed FSN I-Net "could have hundreds of upstream channels". 253 Since the record reflects that an average of 20 nodes exist in each municipality in Rhode Island, the Division is satisfied that Cox's proposal technically satisfies the 12 upstream channel per Service Area standard.<sup>254</sup>

Furthermore, in the event that a scheduling conflict occurs within a node, Cox has identified several measures in its Settlement Agreement proposal that it would take, at its own expense, to further ensure the technical capability needed to satisfy the upstream channel capacity mandated under the Rules. These measures include: the temporary, and when necessary, the permanent use of special equipment to resolve scheduling conflicts<sup>255</sup>; node splitting; and direct The two expert witnesses proffered by the Advocacy Section fiber feeds.<sup>256</sup> (Messrs. Mahoney and Kullberg) both agreed that these measures were appropriate and effective ways to fully comply with the letter and spirit of the upstream channel capacity requirements contained in the Rules. The Division agrees.

<sup>&</sup>lt;sup>252</sup> Id., pp. 3-4.

<sup>&</sup>lt;sup>253</sup> 12/10/01, Tr. 149.

<sup>&</sup>lt;sup>254</sup> 6/27/01, Tr. 95-96.

<sup>&</sup>lt;sup>255</sup> Such equipment employs digital technology and wavelength and time division multiplexing.

<sup>&</sup>lt;sup>256</sup> Joint Exhibit 1, pp. 26-28.

Regarding downstream channel capacity, Cox proposes to begin with four downstream channels per municipality, consisting of one statewide channel, two channels specific to the municipality and one regional channel specific to the Service Area.<sup>257</sup> However, Cox states that it will provide additional channels if demand necessitates additional channel capacity.<sup>258</sup> To accomplish this expansion of downstream channel capacity, Cox would utilize available remedial technologies and/or reassign bandwidth capacity that it currently uses for other purposes.<sup>259</sup>

While downstream channel capacity did not get as much attention as upstream channel capacity in this docket, the Division finds that Cox has sufficient capacity in its FSN to supplement downstream I-Net channel capacity if a need for additional downstream capacity becomes manifest.

The issue of whether Cox's virtual B-cable FSN I-Net "will yield a comparable result" dovetails into this discussion. Section 7.3(d) of the Rules permits the use of an alternative technological means of providing the channel capacities required under the Rules, but only if the alternative technological means "will yield a comparable result". The term "comparable result" is not defined in the Rules.

Two interpretations of the meaning of the term "comparable result" have surfaced in this docket. The Attorney General has taken the position that the term means that Cox's FSN must "provide a result comparable to at least 21

<sup>&</sup>lt;sup>257</sup> 6/27/01, Tr. 167.

<sup>&</sup>lt;sup>258</sup> 6/27/01, Tr. 139.

<sup>&</sup>lt;sup>259</sup> <u>Id.</u>, Tr. 139 and 173-174; and 12/3/01, Tr. 36-37.

downstream and at least 12 upstream television channels". However, Full Channel, along with several members of the public, have discussed the term in the context of a video image quality comparison between the B-cable and virtual B-cable technologies. The comparison was made possible from the demonstration of the two technologies at the Woonsocket High School on December 3, 2001.

Albeit the term "comparable result" is not clearly defined in the Rules, the Division generally agrees with Full Channel's interpretation and would construe the phrase to mean that the video transmissions being delivered over Cox's virtual B-cable I-Net must be "like" or "equivalent" to the transmissions that would be delivered over the B-cable I-Net envisioned in Section 7.3(a) of the Rules.<sup>261</sup>

On this image quality comparison matter, Full Channel and some members of the public criticized Cox's virtual B-cable I-Net for the "jerking" images that were sometimes visible, and the short but noticeable time delay in the transmission. Full Channel asserted that these deficiencies represent sufficient evidence to show that Cox's FSN does not "yield a comparable result". 262

The Division carefully monitored the image quality of both technologies during the demonstration that took place on December 3, 2001. The Division

<sup>261</sup> This definition is consistent with the definition contained in Webster's II New College Dictionary, 1995.

<sup>&</sup>lt;sup>260</sup> Attorney General Closing Brief, pp. 5, 8 and 9.

<sup>&</sup>lt;sup>262</sup> Full Channel Post Memorandum, pp. 4 and 10-11; and 12/10/01, Tr. 170-171.

additionally subsequently examined the two videotapes that were produced during that demonstration in order to determine whether any substantial differences in image quality were discernable.<sup>263</sup> Based on this evidence, the Division finds that the two images were "comparable" within the meaning of Section 7.3 of the Rules.

The Division notes that it provided Full Channel with an opportunity to put on its own B-cable I-Net demonstration in Service Area 5 and that Full Channel declined.<sup>264</sup> Full Channel's demonstration would have given the Division the ability to further compare the image quality of Cox's proposed FSN I-Net with the image quality of a second currently active B-cable type I-Net. Full Channel did not offer an explanation for why it opted to decline a demonstration of its own.

The Division also observed that the severest criticism of Cox's virtual I-Net demonstration came from Mr. Mike Davis, Full Channel's System Manager. Mr. Davis opined that the quality of the images transmitted over Cox's FSN I-Net suffered from inferior clarity and resolution and a time delay "of about one and a half seconds". Mr. Davis further questioned the image quality by relating that "it seemed to continually flick and pop". Notwithstanding the purported sincerity of Mr. Davis' observations and comments, the Division was not able to give his testimony much weight.

<sup>&</sup>lt;sup>263</sup> Cox Exhs. 6(a) and 6(b).

<sup>&</sup>lt;sup>264</sup> 12/10/01, Tr. 68-70.

<sup>&</sup>lt;sup>265</sup> 12/10/01, Tr. 170.

<sup>&</sup>lt;sup>266</sup> Id., Tr. 172.

It became abundantly clear to the Division during these proceedings that Mr. Davis was being less than fully objective in his comments. It started at the June 28, 2001 hearing, when Mr. Davis decided to offer public comment under his real name, Michael McGonagle, after Full Channel had previously declined to proffer a direct case in this docket. Not surprisingly, Full Channel argued ferociously in support of Mr. Davis' request to offer a "public" comment, over the vehement objections of NECTA and Cox. Before giving his comments, Mr. Davis, a/k/a Mr. McGonagle, explained that "Davis" was his professional name and that despite his employment at Full Channel he ought to be allowed to offer "public" comments on Cox's petition filing. Mr. McGonagle insisted that he was not attending the hearing as an employee of Full Channel on that day, but rather was exercising his personal right to appear as a member of the public to offer comment. Mr. McGonagle ultimately recommended that Cox's petition be denied. Later that day, however, the undersigned hearing officer decided to recall Mr. McGonagle after he was observed assisting Full Channel in its crossexamination of Mr. Mahoney. Mr. McGonagle thereupon admitted that he had in fact been assisting Full Channel's attorney during the cross-examination of Mr. Mahoney.<sup>267</sup>

Notwithstanding his previous testimony as a member of the public in this docket, Mr. Davis subsequently "changed hats" and testified at a hearing conducted on December 10, 2001, in his official capacity as Full Channel's System Manager. This time to present disparaging testimony, on behalf of Full

<sup>&</sup>lt;sup>267</sup> 6/28/01, Tr. 260-261.

Channel's interests, related to the image quality of Cox's virtual B-cable I-Net demonstration in Woonsocket, <u>supra</u>. In conclusion, in view of Mr. Davis' flip-flopping personas in this docket, and Full Channel's obvious intent to keep Cox from competing with Full Channel in Service Area 5<sup>268</sup>, the Division is not able to assign much weight to Mr. Davis' critique of the image quality of Cox's FSN I-Net.

b. Is Cox's proposal to provide additional non-video services that will bring high-speed data capability to eligible I-Net users a reasonable contributory basis for waiving Section 7.3(a)'s requirement for a physically separate I-Net?

Under Sections 7.3(c) and (d) of the Rules, cable television companies are required to construct an I-Net that is technically capable of providing "television" channel capacity to eligible institutions. Albeit "data transmission" services are contemplated under the Rules<sup>269</sup>, cable television companies are not required to build this data transmission capacity into their I-Nets. Accordingly, an I-Net that provides data transmission capacity to its eligible users, in addition to the required television channel capacity, would exceed the capacity requirements contained in the Rules.

Under Cox's Settlement Agreement proposal, eligible I-Net users, including all State office buildings, would receive both video and data transport capabilities, at Cox's expense. The video transport capability is designed to be used to originate programming for distribution to residents or for closed-loop distribution. For data transport capability, I-Net users would be able to select

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<sup>&</sup>lt;sup>268</sup> See Order Numbers: 16646, 16718, 16759, 16820 and 17051.

<sup>&</sup>lt;sup>269</sup> See Sections 1.2(t) and 11.3(d) of the Rules.

from two available options, specifically, a "virtual area network" option, or a cable modem-based internet service option. Full descriptions of the proposed video transport capabilities and the two data transport options are contained in "Appendix 3", attached to this report and order.

The Division has carefully studied the proposed data transport options identified in the Settlement Agreement and finds that the availability of these services to I-Net users clearly goes above and beyond the capabilities required for I-Net systems under Section 7.3 of the Rules. As such, the Division would find such services to constitute a reasonable contributory basis for waiving Section 7.3(a)'s requirement for a physically separate I-Net.

## c. <u>Are the equipment and user fees to utilize Cox's</u> proposed I-Net services reasonable?

In its initial proposal, submitted on November 15, 2000, Cox planned to offer its video transport services to I-Net users via a digital interface that required I-Net users to purchase a "CODEC" (a video decoder device). The price for a CODEC ranges between \$5000 and \$23,000, depending on the type of programming being broadcast.

The expense to purchase this necessary device generated a good amount of public criticism, as a CODEC is not required when utilizing a conventional (non-digital) B-cable I-Net. In response to this equipment cost concern, Cox modified its initial proposal so that I-Net users could also make use of an analog interface to access Cox's FSN I-Net. By offering this option, Cox eliminated the need for I-Net users to purchase the expensive CODEC, which Cox asserts

brings the necessary equipment costs down to a level that is comparable to the equipment required to utilize a B-cable type I-Net.<sup>270</sup>

Despite this modification by Cox, some of the public witnesses continued to criticize Cox for not providing I-Net users with all of the equipment necessary to use Cox's virtual B-cable I-Net system free of charge. Many suggested that the law mandates that Cox include all the necessary equipment at no cost to eligible I-Net institutions. Full Channel and some public witnesses also argued that Cox should not charge anything for the enhanced data transmission service options available under the Settlement Agreement proposal. The Division finds that the law does not support these claims.

Section 7.3(a) of the Rules does require cable television companies to bear much of the expense associated with providing I-Net service. However, the Rules do not require a cable television company to bear all of the expenses. The Rule "the specifies that trunk and distribution system institutional/industrial network shall be constructed at the certificate holder's expense" and that "a standard installation for both the residential and institutional/industrial networks shall be provided to each institution designated for inclusion in the network at the certificate holder's expense". The Rules define a "standard installation" as "...an aerial drop of at least one hundred fifty (150) feet from a single pole attachment to the customer's residence or other structure to be served".271 A "standard installation" does not include free service.

<sup>&</sup>lt;sup>270</sup> Cox Exh. 5.

<sup>&</sup>lt;sup>271</sup> See Section 8.6(a) of the Rules.

The Rules straightforwardly address the fees that cable television companies may charge for I-Net and data transmission services. Section 11.3 (c) and (d) unambiguously include "institutional subscribers" and recipients of "data transmission" services as classes of ratepayers under the Rules. The ability of cable television companies to charge for these I-Net-related services is further evidenced by some of the statements previously issued by the Division during the promulgation of the instant Rules and also by the Rhode Island Supreme Court in a case that reviewed the Division's authority to mandate that CATV companies construct an I-Net system at their own expense.<sup>272</sup>

In conclusion, the Division has evaluated the equipment costs associated with the two I-Net technologies and finds that the equipment required to use Cox's FSN I-Net is reasonably analogous to the equipment needed to use a conventional B-cable I-Net. Therefore, the Division finds that the equipment cost associated with using Cox's virtual B-cable I-Net would not pose a substantive economic impediment to Cox's I-Net users. With respect to the claims that Cox must, or should, provide free user equipment and/or free enhanced data transmission services to eligible I-Net institutions, the Division finds insufficient legal support for such claims.

d. <u>Is Cox's proposal to include State buildings as eligible I-Net institutions a reasonable contributory basis for waiving Section 7.3(a)'s requirement for a physically separate I-Net?</u>

<sup>&</sup>lt;sup>272</sup> See Division's January 30, 1981 "Statement Upon Adoption of Rules" wherein the Division noted that I-Net users "are advised to consider the costs and benefits of their participation"; also, the Division's October 16, 1981 "Statement Upon Adoption of Additional Rules" (Docket No. 1548), wherein the Division acknowledged that I-Net users should be allowed to levy appropriate charges for the use of their facilities; and, also, Berkshire Cablevision of Rhode Island, Inc. v. Edward F. Burke, 571 F. Supp. 976 (1983), wherein the Court held cable operators have a "right to charge" for the I-Net service they are required by law to provide.

Section 7.3(b) of the Rules generally identifies the institutions that are eligible to receive I-Net services from cable television companies. Under the Settlement Agreement proposal Cox has agreed to provide I-Net services to these institutions. Cox has additionally agreed to provide I-Net services to the State's many office buildings even though it contends that State buildings are not included as eligible institutions under this Rule. The Division does not accept Cox's interpretation of Section 7.3(b) of the Rules with respect to State offices.

A thorough reading of Section 7.3(b) shows that the institutions listed do not comprise a complete list. Indeed, the Rule leaves the list open-ended as evidenced by language that requires cable television companies to design and construct an I-Net "...to provide service to at least the following [institutions]". Language that authorizes the Administrator to select "institutions [and] public buildings...for inclusion in the statewide interconnection network..." that would also be eligible for I-Net services provides additional evidence that the list of eligible users identified in the Rule is incomplete.

Moreover, under Section 1.3(c) of the Rules, the Administrator is authorized to "periodically...review and...revise the requirements applicable to the [cable television company's] system, and to make such changes, adjustments, and revisions...as are reasonable, consistent with the public interest, and responsive to specific conditions in or specific needs of the public to be served in a specific service area or the state at large". The Division finds that such sweeping authority would clearly permit the Division to compel cable television companies to provide I-Net service to State offices.

In conclusion, while the Division accepts Cox's decision to include State offices in its I-Net proposal as a positive gesture, the Division cannot consider this offer as a reasonable contributory basis for waiving Section 7.3(a)'s requirement for a physically separate I-Net.

### e. Who would bear the cost for constructing a physically separate I-Net?

Some members of the public have suggested that the construction expense for a physically separate I-Net is irrelevant because the law requires that the expense be borne exclusively by Cox, and not by Cox's residential or I-Net subscribers. Correspondingly, Full Channel demands that Cox build a physically separate I-Net because it would be unfair to Full Channel to allow Cox to avoid this cost of service expense in a competitive market environment.

The Division has concluded that albeit Section 7.3(a) requires that cable television companies bear the expense of constructing an I-Net "trunk and distribution system" and providing "standard installations", <u>supra</u>, much has changed since the Rules were promulgated in the 1980's. When these requirements were established in the Rules, cable television rates were subject to significant regulatory oversight by both the State and the federal government. Today, however, rate regulation has been largely eliminated through preemptions contained in the federal law.<sup>273</sup>

For example, the rate that Cox charges for its "upper tier" cable services (also called "programming services") was completely deregulated by Congress on

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<sup>&</sup>lt;sup>273</sup> See 47 U.S.C. §543.

March 31, 1999.<sup>274</sup> This upper tier of service comprises approximately 75% of the channel programming offered to Cox's subscribers. Likewise, about 75% of a typical subscriber's cable bill relates to charges for this upper tier programming. Essentially, Cox can charge anything it wants for these "upper tier" services. Arguably, the reality of competition from satellite-based video service providers coupled with elasticity of demand considerations should, in theory, keep "upper tier" rates from skyrocketing beyond the perfunctory annual "cost of doing business" increases. However, there are no guarantees that annual rate increases will remain constant. The hard truth is simply that there just are no regulatory mechanisms available to the Division to cap these annual "upper tier" rate increases.

So what happens to Cox's upper tier rates if it must spend up to \$20 million to construct a physically separate B-cable throughout Rhode Island? Odds are good that residential subscribers will see a dramatic increase in "upper tier" programming rates as reflected on their cable bills. In fact, it was this very concern about the impact on subscriber bills, which prompted the Chairman of the Service Area 9 Citizen's Advisory Committee, Mr. Thomas Chinigo, to question the propriety of compelling Cox to construct and maintain any I-Net system in Rhode Island. Mr. Chinigo fearing that the a demand for I-Net services may never exist, stated that "if we're going to build it and nobody comes, it's a total waste of money out of some consumer...I don't want unnecessary costs

<sup>&</sup>lt;sup>274</sup> See 47 U.S.C. §543(c)(4).

being passed along to the subscriber of one network or the other if we're not using it".  $^{275}$ 

Therefore, when considering the matter of whether Cox ought to be compelled to construct a "physically separate" I-Net in its many Service Areas in Rhode Island, the Division would be remiss if it did not take into account whether the benefit of having a physically separate I-Net outweighs the related construction and maintenance costs, and what impact such a decision may have on cable subscriber rates.

# f. Do the covenants contained in the Settlement Agreement provide a reasonable contributory basis for waiving Section 7.3(a)'s requirement for a physically separate I-Net?

The Settlement Agreement proposal submitted by Cox and the Advocacy Section provides detailed terms and conditions, which define what Cox's responsibilities and obligations will be if it is granted the waiver it seeks. The Division has fully scrutinized these terms and conditions and finds that the totality of these terms and conditions does provides a reasonable basis for granting Cox's waiver request. Before reaching this conclusion, the Division did consider the various criticisms proffered by Full Channel's witness, Mr. Hahn. However, the Division found that Mr. Hahn's concerns were adequately rebutted by the subsequent testimonies of Messrs. Wolfe, Gardiner and Mahoney.

Lastly, the Division also finds that the Settlement Agreement provides sufficient regulatory safeguards to ensure that Cox will stay committed to fulfilling the covenants that it has made in this docket.

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<sup>&</sup>lt;sup>275</sup> 12/19/02, Tr. 94-97.

### g. Conclusion

The Division has considered all of the issues and findings addressed above with respect to the question of whether granting Cox a waiver from Section 7.3(a)'s requirement for a physically separate I-Net would be in the public interest, and has concluded that granting Cox such waiver would be in the public interest.

### C. Miscellaneous Issues

### 1. <u>Level-playing-field statute</u>

When Cox applied for authority to construct and operate a CATV system in Service Area 5 in 2000, Full Channel intervened and opposed the application based on a number of grounds.<sup>276</sup> One of the grounds was an argument by Full Channel that the Division could not grant Cox any of the requisite CATV certificates without first requiring Cox to construct the "physically separate" I-Net required under Section 7.3(a) of the Rules. Full Channel argued that a waiver of this requirement would violate the "level-playing-field" provisions of Rhode Island General Laws, Section 39-19-3. The pertinent provision on which Full Channel relies states as follows:

"Any additional certificate issued shall not contain terms or conditions more favorable or less burdensome than those imposed on the incumbent company."

The Division rejected this argument.<sup>277</sup> In its final decision on the matter, the Division found, <u>inter alia</u>, as follows:

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<sup>&</sup>lt;sup>276</sup> See Docket No. D-00-C-5

<sup>&</sup>lt;sup>277</sup> See Order No. 16646, pp. 55-69.

"As both Full Channel and Cox will be required to provide I-Net service in Service Area 5, the Division finds that the functional equivalence and parity purpose of R.I.G.L. § 39-19-3 has been reasonably satisfied".<sup>278</sup>

During this docket, Full Channel continued to contend that it would be inappropriate for the Division to exempt Cox from the requirement of having to construct a "physically separate" I-Net in its Service Areas. As the Division in a previous and related docket comprehensively addressed this issue, the Division will not address the issue again here.

### 2. <u>Citizens' Advisory Committees and Cable</u> Television Advisory Council

Full Channel maintains that before the Division "can even consider" Cox's I-Net petition, the Division must reestablish all Service Area Citizens' Advisory Committees and the Cable Television Advisory Council, as required in Section 15.2 of the Rules. Full Channel made the same argument in Docket No. D-00-C-5, which was the docket established by the Division in response to Cox's April 20, 2000 petition seeking authority to construct and operate a CATV system in Service Area 5, <u>supra</u>. In response to Full Channel's argument, the Division determined that the matter was unrelated to Cox's application and the burden of proof related thereto.<sup>279</sup> The Division has determined that a similar finding would be appropriate in this docket as well.

### 3. <u>Investigation of Cox's past and current compliance with the Rules</u>

As in the preceding issue, Full Channel maintains that before the Division

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<sup>&</sup>lt;sup>278</sup> Id., p. 68.

<sup>&</sup>lt;sup>279</sup> See Order No. 16646, pp.71-72.

"can even consider" Cox's I-Net petition, the Division must conduct an investigation to first determine whether Cox is in full compliance with all of the State's CATV laws. Full Channel argued this position in Docket No. D-00-C-5 too. As in the previous docket, the Division finds that Full Channel has offered insufficient evidence to warrant the comprehensive investigation that Full Channel seeks.<sup>280</sup>

4. Should Cox be compelled to provide eligible institutions with faster data transport services at no charge or at substantially greater discounts?

During the proceedings conducted in this docket, a number of educational and State institutions sent representatives to urge the Division to compel Cox to provide eligible I-Net institutions with faster data transport services at no charge or at substantially greater discounts.

The Division briefly touched upon this request by these institutions in its previous discussions regarding the nature of I-Net services that are required under Section 7.3 of the Rules and the propriety of Cox's proposed user fees, supra. However, in view of the impassioned interest and testimony that was expressed by these institutions the Division believes that more must be said on this issue.

Several of these institutions recommended that in lieu of compelling Cox to construct a physically separate I-Net, the Division should assign a dollar value for what it would cost Cox to build a physically separate I-Net and then direct Cox to provide a like amount to eligible institutions in the form of credits toward the

<sup>&</sup>lt;sup>280</sup> <u>Id</u>.

purchase of faster data transport services. Regrettably, neither the law nor the facts would buttress this recommended I-Net model.

As discussed earlier, the existing law requires that cable television companies construct an I-Net with a capacity to provide only video services, not data transport services. Therefore, if there is no legal basis for directing Cox to provide I-Net services that include data transport capacity, there is certainly no legal basis to compel Cox to provide these services free of charge or at substantially discounted prices.

Next, assuming that the Division could legally compel Cox to establish a pool of funds, based on the money it would have spent on a physically separate I-Net, that pool of funds would not be sufficient to maintain the free or substantially discounted data transport services for long. Statewide there are hundreds of State, municipal and educational buildings that would be eligible to take I-Net services from Cox. If you consider the fair market value of the data transport services in issue and compare that value to the \$4 million to \$20 million cost to construct a B-cable throughout Cox's Service Areas, the math would suggest that the recommended "pool" would hardly provide for services in perpetuity. Additionally, unlike the one-time funded pool, the fair market value of data transport services will invariably increase over time, which will only speed up the inevitable depletion of the funds contained in the pool.

The Division is further concerned with the constitutionality of this "pool" recommendation. Arguably, forcing Cox to involuntarily fund the pool would amount to a taking of [Cox's] property without just compensation, a governmental

act that is clearly prohibited by both the United States and Rhode Island Constitutions. Furthermore, the expense that Cox would incur litigating this issue in the Courts would ultimately be borne by Cox's subscribers.

In conclusion, the Division finds no legal or factual basis that would sanction a Division decision to force Cox to provide free or substantially discounted data transport services to I-Net institutions. Although the Division can appreciate the need for these services and the enormous benefit these institutions would derive from the potential savings, the Division lacks the authority to approve such an extreme I-Net model.

### D. Conclusion

After a thorough examination of the record evidence and pertinent law, and after careful consideration of the legal arguments proffered by the parties in this docket, the Division has concluded that the Settlement Agreement proposal submitted by Cox and the Advocacy Section provides a reasonable resolution to the disputed issues regarding Cox's legal obligations to provide I-Net services under Section 7.3 of the Rules. The Settlement Agreement also makes it clear that Cox will assume all of the costs associated with the signal processing equipment within the FSN, as well as the trunk and distribution components of the virtual B-cable I-Net; a significant result in view of Cox's current unfettered ability to unilaterally increase its rates to alternatively recover these costs. The Division further finds that the Settlement Agreement provides reasonable remedial measures, which sufficiently address a number of significant and legitimate concerns expressed by members of the public. In short, the Division

believes that this agreement strikes a reasonable equilibrium between the myriad competing interests identified during these proceedings and the prevailing legal design standards for I-Net services in Rhode Island.

Now, Accordingly, it is

### (18126) ORDERED:

- 1. That the November 15, 2000 petition filing of CoxCom, Inc., seeking approval of its existing Institutional/Industrial Network arrangements, or in the alternative, a waiver of a portion of Section 7.3(a) of the Division's *Rules Governing Community Antenna Television Systems*, is hereby granted in part and denied in part.
- 2. That the November 15, 2000 petition filing of CoxCom, Inc., seeking approval of its existing Institutional/Industrial Network arrangements, is hereby denied.
- 3. That the November 15, 2000 petition filing of CoxCom, Inc., seeking a waiver of a portion of Section 7.3(a) of the Division's *Rules Governing Community Antenna Television Systems*, is hereby granted.
- 4. That the Settlement Agreement that was submitted by Cox and the Advocacy Section in this docket, is hereby approved and adopted. The Settlement Agreement, attached to this report and order as "Appendix 3", is

| hereby incorporated by reference | •                                |
|----------------------------------|----------------------------------|
| Dated and Effective at Warwick,  | Rhode Island on January 27, 2005 |
|                                  |                                  |
|                                  |                                  |
| John Spirito, Jr., Esq.          | Thomas F. Ahern <sup>281</sup>   |
| Hearing Officer                  | Administrator                    |

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<sup>&</sup>lt;sup>281</sup> A NOTE FROM THE ADMINISTRATOR: The genesis of Docket No. 2000-C-7 goes back to the year 2000. The proceedings in this docket were many and the record extremely voluminous and complex. Final briefs from the several parties in the docket were being filed as late as 2003. After the hearing officer submitted his recommended decision and findings to me for approval, I decided to exercise my authority under Rhode Island General Laws, Section 39-1-15 to take additional time to consider the complicated issues and the evidence of record presented in the docket. While the adjudication of this matter, and my subsequent independent review of the record, has taken a significant amount of time, in the final analysis, I believe the time was appropriately expended in the best interests of the parties and the public.

Greg Bicket Vice President and General Manager 111 Comstock Parkway P.O. Box 21002 Cranston, Rhode Island 02920 (401) 821-1919 (401) 275-6139 fax

July 14, 2000

Administrator Thomas F. Ahern State of Rhode Island Division of Public Utilities and Carriers 100 Orange Street Providence, RI 02903



Dear Mr. Ahern:

Per our numerous conversations on this issue, Cox Communications is pleased to offer the following proposal regarding continued compliance with the DPUC's Rules Governing Community Antenna Television Systems, and more specifically Section 7.3 of the Rules (the "B-Cable" requirement).

As you know, the B-Cable requirement was designed in the early 1980s to afford eligible educational and municipal participants with a network separate from the residential network, designed to foster a unique form of video inter-connection within cable television service areas defined by the Division. Under the rules, cable operators were required to construct these institutional "closed looped networks" at their own expense in each service area. Communities and schools within a service area would share the B-Cable capacity for video interconnection.

Cox Communications believes that since the idea of B-Cable was first contemplated, many factors have come about to render Section 7.3 of the rules governing B-Cable obsolete. Technological advancements achieved in the telecommunications arena and the state-wide versus local nature in which cable systems today operate have largely led to the well intentioned B-Cable requirements becoming unused, ineffective and antiquated.

Therefore, Cox Communications is making the following recommendations that would not only deliver on the video intent of the B-Cable initiative, but would go further to deliver services that are well beyond the basic B-Cable rule requirements. We believe that this proposal represents the best course of action for meeting the goals of the B-Cable rules within today's vastly changed technological environment. (This proposal is consistent with Cox Communications' extensive filing submitted to the Division on May 3, 1999.)

In this proposal, Cox Communications intends to describe how the company can provide services to a far greater number of users in its service area than ever envisioned by the architect's of the B-Cable rules. We believe that through our advanced broadband infrastructure, we can provide B-Cable functionality that not only meets but, indeed, exceeds the requirements for service under Section 7.3 of the

All internal wiring beyond the first outlet provided via the MPOE will be constructed by Cox Communications on a time and materials basis, or by a licensed contractor hired by, and at the expense of, the municipality. Data network support provided Cox would charge Communications to a municipality on a time and materials basis. Similar connectivity is offered to the state. Twenty-five state buildings meeting the above specifications will be designated as "primary" by the state. As with municipal buildings connection or network support for locations beyond the 25 "primary" locations will be charged on a time and materials basis.

Specialized Terms of the Virtual B Video and/or Data Network:

- The municipality and state government must agree not to use the Virtual B services for other than municipal or state internal communications, and cannot give, sell, resell or otherwise distribute this data capacity or transport capability. Violation of this understanding will result in termination of all services in excess of the virtual B Cable video services to that location.
- Because such a proposal would involve a significant commitment of technical, construction and engineering resources, Cox Communications would require that this proposal be implemented on a first-come, first-served basis, upon written request, where facilities are available. Cox Communications would allocate resources to complete a minimum of 10 standard installations per month. Initial installations will for be one or all services. Subsequent installations will be charged at the normal installation rate.

## Schedule 1 Virtual B - Data Network Access Rates:

For locations that qualify within this proposal requesting data transport at rates greater than 128 Kbps Cox Communications will apply the following reduced rate structure:

Up to 128 Kbps transmit/128 Kbps receive: no charge

256 Kbps transmit/256 Kbps receive: \$ 80 per month per location

♦ 256 Kpbs transmit/384 Kbps receive: \$100 per month per location

♦ 256 Kbps transmit/512 Kbps receive: \$120 per month per location

Each Additional IP \$7/mo.

 other High Speed access arrangements can be added at current Market rates for the service.

Should this proposal be accepted by the Division by October 2000, Cox Communications would guarantee these rates for a period of three years from date of acceptance by the Division. Rates would be adjusted no more than once during every 18-month period following the expiration of the initial three-year period.

The VAN options will establish a private municipal network that allows data to be bridged between points on a dedicated "layer-two" path between points within a community. This service does not include Internet access or other network services (such as e-mail, web-hosting, DNS, etc.). Internet and other services can be purchased from Cox or any other provider who will terminate the ISP access the customer's network. This configuration will allow VAN points within the network to gain Internet access and other services under the control of the municipality as well as encourage a multi-supplier environment. The municipality should be advised in multi-terminal environments where more than three terminals exist in a location that they are responsible for providing appropriate network control devices to manage the use of the VAN allocated bandwidth to and from each site in their network and each user.

2. The second option will be to establish a cable modem based Cox provided Internet access service at the same service levels offered to Cox Business customers. Like the VAN offering will be rate limited at 128 Kbps and because it is a "layer-3 connection" will be limited to three IP addresses. Additional access speeds and IP addresses can be purchased as noted in Schedule 1. Please note that future network enhancements or applications that require "layer 3" connections to meet municipal requirements will also be rate limited to 128 Kbps and three IP addresses as part of the offer. This configuration will not include any additional Internet services such as e-mail hosting, web hosting, FTP servers, etc. which can be ordered at current Market rates. This segment is intended for client sites that are not part of a central server configuration for a multi-location environment.

# Customer Provided Equipment:

 The Cox provided data offerings will utilize the Data-Over-Cable Interface Specification (DOCSIS) standard modem. Cox will make units available for purchase to all participating municipalities at cost plus 15% rate (or rental rate if desired). All terminating digital video equipment will also be provided at 15% over Cox cost.

# Standard Installation of Virtual B Video and/or Data includes:

- A standard installation will include the cost for terminating the service within a 150-foot distance between the tap on the Cox Communications network to the eligible building's minimum point of entry (MPOE) and assumes clear passage of conduit and pole attachments to the designated building. For non-standard installations (those greater than 150 feet or specialized conduit or pole attachment agreements), Cox Communications will utilize the same rates charged to Cox Business Customers based on time and materials.

# Summarization of Cox Virtual B Proposal

Cox will provide a virtual B Cable capability that will support a combination of two-way data and/or video origination services. The "virtual B" function will utilize upstream and downstream bandwidth that is reserved for each municipality. This offer is unique in that it will provide dedicated capacity for one-way and/or simultaneous two-way video and/or data capacity. The proposal is flexible in its offering so municipalities can define their needs and select an offering to meet the combination of basic data and video requirements while also allowing them to upgrade segments or all points in the network beyond the basic offering at pre-defined rates. This offer applies to municipalities in the Cox serving area of RI and 25 designated "state sites" as defined by the Department. The details of the Cox proposal are best summarized as follows:

#### Virtual Video Network:

- The virtual video portion of the Cox proposal is based on users connecting an upstream modulator to a pre-assigned bandwidth that will be identified when scheduled with Cox. The end modulator will be owned/purchased by the municipality and provided at cost by Cox. Initially, upstream video will be analog, but will move to digital (such as QAM16) as equipment is available and one channel will be available per node area in a municipality. All originated programming can be routed to private downstream channel on the digital tier or to the assigned local origination channel on the existing residential network. Cox will make a pool of digital modulators available for loan by a municipality within each local origination area and downstream video will be a part of a digital downstream carrier assigned by Cox. Advances in IP video-streaming technology will further aid conferencing applications using the data Virtual Area Network (VAN) or private VPN's established within the community.

#### Virtual Data Network:

- The Cox data offering extends one or the other of two options for data needs to Rhode Island municipalities. It will be the responsibility of the community to identify which solution best meets their data and video needs and to supply all necessary equipment required for connection to the network.
  - 1. The first option is the VAN or Virtual Area Network approach that simply provides for the interconnection of Local Area Network points across multiple locations within a community. Each main site be rate limited to 128 Kbps at no cost to the municipality. All data addresses will be assigned by the municipality within the existing community network schemes by their network administrator or MIS manager. Additional access speeds can be purchased in accordance with the attached schedule.

111 Comstock Parkway P.O. Box 21002 Cranston, Rhode Island 02920 (401) 821-1919





October 12, 2000

Mr. Patrick Mahoney Vice President, Systems Engineering Broadband Access Networking Group 225 Stedman Street Lowell, MA 01851

Summarization of Cox Proposal Re:

Dear Patrick:

Thank you for your e-mail of October 2, 2000, and your draft summary of the Cox proposal we discussed at our meeting in September.

As you requested, I have reviewed your summary, and have revised it to more accurately capture the details of Cox's proposal. I've drafted the revision to also answer the additional questions from your e-mail. In addition, the production definition information is contained in this revised summary.

I hope this is responsive to your questions. Please contact me should you need any additional information, or if you have any additional questions.

Sincerely,

Mark P. Scott Vice President

Cox Business Services

Enclosure

Mr. Eric Palazzo, Associate Administrator, Division of Public Utilities

Ms. Laurine Boyle, Cox Communications

Mr. John Wolfe, Cox Communications

Mr. William Durand, Executive Vice President, NECTA

- 8. Cox Communications would retain the right to conduct site visits and network monitoring to ensure Quality of Service objectives are met.
- 9. Municipal and state government would agree not to use for other than municipal or state internal communications, give, sell, resell or otherwise distribute this data capacity or transport capability. They will also identify all terminals to be connected to the network prior to connecting devices to the network. Violation of this understanding will result in termination of all services in excess of the virtual B Cable video services to that location.
- 10. Because such a proposal would involve a significant commitment of technical, construction and engineering resources, Cox Communications would require that this proposal be implemented on a first-come, first-served basis, upon written request, where facilities are available. Cox Communications would allocate resources to complete a minimum of 10 standard installations per month. Initial installations will for be one or all services. Subsequent installations will be charged at the normal installation rate.
- 11. Prior to undertaking this commitment, and providing free data transport services to municipal and state government, Cox Communications would require a definitive statement from the Division that the company, through the approach outlined above, remains in full compliance with Section 7.3 of the Division's *Rules*.

- 3. As stated in item 1 above, this service would be made available to one connection, serving up to three IP addresses, at each municipal building and "primary" state government building eligible for "B-Cable" services. Cox Communications will make service available to additional IP addresses at a monthly rate of \$7.00 per IP address, and \$3.00 per month per terminal, including those terminals behind a proxy server. This compares very favorably to the \$9.00 per month rate currently assessed commercial data customers for additional IP addresses.
- 4. This means that municipal and state government would have access to the Internet from buildings served. This would permit high speed networking between locations should these entities choose to pay discounted rates for services to other internal locations. Participating municipalities and state government could access the Internet through Cox@Work or through their Internet service provider (ISP) of their choice.
- 5. As with the video service provided, Cox Communications will bear the cost for standard installations (e.g., a 150-foot distance between the tap on the Cox Communications network to the eligible building's minimum point of entry [MPOE]). For non-standard installations (those greater than 150 feet), Cox Communications will develop a rate based on time and materials.
- 6. All internal wiring beyond the first outlet provided via the MPOE may be constructed by Cox Communications on a time and materials basis, or by a licensed contractor hired by, and at the expense of, the state or municipality. Data network support provided by Cox would be charged to the user on a time and materials basis. Similar connectivity is offered to the state. Each municipality will designate a primary site. Twenty-five state buildings meeting the above specifications will be designated as "primary" by the state. As with municipal buildings, connection or network support for locations beyond the 25 "primary" locations will be charged on a time and materials basis.
- 7. As is the case with video services, municipal and state government would be responsible for providing and maintaining all end-user equipment, including but not limited to computers, cable modems, multiplexers, LAN/WAN internal wiring, telephones and other equipment. Cox Communications would require that all cable modems used by eligible participants be DOCSIS-compliant, and compatible with virtual private network (VPN) applications. Technological changes may require Cox to revise future requirements for end user equipment. Such changes would be the sole responsibility of the educational, municipal or state users.

Section 7.3, and provides for a threshold level of <u>free data and Internet access</u> (high-speed Internet access) to Municipal and State government locations passed by Cox's broadband network, considerably beyond the requirements of Section 7.3.

Moreover, Cox Communications proposes to offer free access to Cox@Work (at transmission rates of 128 kbps upstream and 128 kbps downstream) to eligible users, including state government buildings. This free access would be limited to one connection, and up to three Internet Protocol (IP) addresses, per eligible building.

Should eligible parties require Internet access and telephone services beyond the level offered, these services would be made available at discounted rates which are considerably below Cox Communications' standard business rates.

This means that Municipal and "primary" State government buildings passed by the Cox network would be provided 128 Kbps two way access to the Internet, with free access through a Cox-provided Internet service such as Cox@Work. Municipalities and state government locations seeking service beyond the level offered herein would be offered discounted pricing on additional services desired.

# IV. Data Proposal Specifics

1. Cox Communications will give municipalities and state locations the option to add a direct high speed data connection with Cox-provided internet service (such as Cox@Work) with a limit of four IP addresses (standard service) or a "virtual private network" (VPN) with no internet which will permit municipal and state governments to pass by its network to have B-Cable functionality for data applications. These VPNs would originate and terminate within each community to emulate the closed loop or contained network envisioned under the original B-Cable rules. Cox would provide service of up to 128 Kbps upstream and downstream for free to eligible users; higher transmission rates would be available at discounted MFN rates.

These networks would be tied to three Internet protocol (IP) addresses. Such networks would provide Municipal or State governmental entities to the World Wide Web, a common Metropolitan Area Data Network, or a state-wide data network to interconnect existing facilities and users.

2. To demonstrate Cox Communications' willingness to partner with municipal and state government to address their telecommunications needs, Cox Communications proposes to provide two-way 128 Kbps data transmission and reception services to municipalities at no charge. This 128 Kbps service would be functionally equivalent to a frame relay network, but with transmission speeds of more than twice what is currently provided via RINET to and participating schools. Please note that Cox Communications makes this offer absent any requirement under Section 7.3 to make data transmission services available for free.

# I. Educational use of Cox Communications' network for video services

The users of this virtual B Cable capacity will utilize video capabilities in the same fashion as the original B-Cable agreement anticipated and will provide one-way and/or simultaneous two-way video capacity that could be linked with other users in Rhode Island via digital transmission techniques not available in traditional CATV networks, and clearly not available during the development of Section 7.3 of the *Rules*. The users of this "virtual B Cable" capacity will utilize the video system in the exact fashion the original B-Cable agreement anticipated, with one-way and/or simultaneous two-way video capacity linking eligible users within a community or service area. For example, a school in Westerly would be able to originate video programming watched by all Rhode Island schools on the network. Two-way programming, scheduled by the users would permit a lecturer in Woonsocket to answer questions live, from students watching in Pawtucket or North Kingstown. Utilization of Cox Communications' most advanced network will ensure high quality performance.

# II. Municipal and state use of Cox Communications' network for video services

As described in detail in its May 3, 1999 filing, Cox Communications will continue to provide B-Cable functionality for video services to municipal users passed by its network, using the capacity contained in the company's state-of-the-art, hybrid fiber-coaxial Full Service Network platform. Traditional downstream basic cable programming will continue to be available to all qualified locations along with dedicated digital channels that will provide the "downstream portion of the closed loop" video function envisioned in the original B-cable requirements. The Network will also support upstream video signals via the same cable termination that can be delivered to other local points in the municipality or multiple locations statewide that are scheduled by the users of the Cox network. Together the combination of two capabilities and access to the traditional basic cable create a wide-ranging virtual network that go beyond the limited and contained service required under the *Rules*.

Although state government building are expressly <u>not</u> included in the list of eligible institutions under Section 7.3 of the Rules, Cox proposes to make this "virtual B Cable" functionality available to certain state government buildings as well.

# III. Municipal and state use of Cox Communication's network for data delivery services (e.g., Internet access)

In addition to continuing full compliance with its video obligations under Section 7.3, as described above, Cox Communications would facilitate the use of Cox Communication's B-Cable functionality for Internet access and/or closed user data networks in addition to video. This proposal fully exceeds both the letter and spirit of

As you know, this proposal follows months of correspondence, technical meetings and dialogue. We make this proposal in the context of that communication, and stand behind this proposal through August 14, 2000, when if not approved, it is withdrawn. We are eager to reach an agreement with the Division so that we can begin to update and perhaps invigorate this initiative in a manner that is reflective of this proposal. Please know that the team at Cox Communications is available at your convenience to provide any additional details that you might require concerning this proposal.

Sincerely,

Greg Bicket

Attachment

cc: Eric Palazzo, Associate Administrator, Division of Public Utilities and Carriers Mark Scott, Vice President, Cox Communications
John Wolfe, Vice President, Cox Communications

Rules. To the benefit of eligible participants, our proposal takes full advantage of the technological advancements and resources that Cox Communications has to offer as the state's premier provider of integrated video and data services.

Our approach would voluntarily increase Cox Communications' contribution under the B-Cable rules in two major ways. First, Cox Communications proposes to allow schools and municipalities, <u>as well as</u> designated state buildings passed by its network, to utilize Cox Communications' state-of-the-art hybrid fiber-coax network for video.

Secondly, the company would voluntarily allow eligible participants to utilize its broadband networks for certain Internet access and high-speed data services beyond the basic video services required under the rules. Under the Cox proposal, primary outlets for some high-speed data transmission services, including access to Coxprovided Internet services such as Cox@Work, would be made available at no charge to eligible users, while other, more extensive services (including telephone service) would be made available at a discounted rate. Under the existing B-Cable rules, there is no requirement that a cable operator provide more than basic video services.

Significantly, this proposal would not reduce Cox's voluntary commitment to provide one free high-speed Internet installation to every school passed by the company's broadband network.

Through this proposal, each municipality (as well as the State) would benefit from the functionality of a data network, a regional video channel and two town-specific video channels (two statewide video channels in the case of the State). This is in addition to the two statewide Interconnect channels and public access channels currently available through Cox's residential channel line-up.

Cox Communications recommends avoiding some of the limitations of Section 7.3 of the rules by clarifying that this expanded grant on the part of Cox Communications is limited to video and data services to the extent described herein, and that future services are specifically not part of this or any future commitment.

What follows is a detailed description of the services Cox Communications is prepared to deliver and the manner in which these services would be deployed. This proposal is designed to be implemented in its entirety. We believe that this proposal is clearly in compliance with the spirit and intent of Section 7.3 of the Rules and, indeed, exceeds the level of service Cox is required to offer to eligible institutions under Section 7.3. We hope that the Division will view this proposal as a good-faith effort by Cox Communications to continue to meet the technologically obsolete "B-Cable requirements" given today's technological environment and the advancements enjoyed in the present telecommunications marketplace.

#### CERTIFICATE OF SERVICE

I, Alan D. Mandl, certify that on this day of November, 2000, I have caused the Petition of CoxCom, Inc., d/b/a CoxCommunications for an Approval of I-Net Arrangements or in the Alternative, for a Waiver of a Portion of Section 7.3(A) of the Rules Governing Community Antenna Television Systems to be served, by (a) certified mail, return receipt requested, to (1) the Chief Executive Officers of each municipality in Rhode Island; (2) the Chairman of each Service Area Citizens' Advisory Committee in all Service Areas presently served by Cox Communications and in Service Area 5; and (3) the chairman of the Cable Television Advisory Council; and by (b) first class mail, postage prepaid, to (4) Paul Roberti, Assistant Attorney General, State of Rhode Island; (5) counsel for Full Channel TV, Inc.; (6) counsel for American Broadband, Inc.; (7) Leo Wold, Esq., Special Assistant Attorney General; and (8) William Durand, Esq., New England Cable Television Association, Inc.

Dated at Boston, Massachusetts this Lay of November, 2000.

Alan D. Mandl

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DIVISION OF PUBLIC UTILITIES AND CARRIERS

|   | )                       |
|---|-------------------------|
| PETITION OF COXCOM, INC., D/B/A COX       | )                       |
| COMMUNICATIONS FOR AN APPROVAL OF         | )                       |
| I-NET ARRANGEMENTS OR IN THE ALTERNATIVE, | ) Docket No. D-2000-C-7 |
| FOR A WAIVER OF A PORTION OF SECTION      | )                       |
| 7.3(A) OF THE RULES GOVERNING COMMUNITY   | )                       |
| ANTENNA TELEVISION SYSTEMS                | )                       |
|   | )                       |

#### **SETTLEMENT AGREEMENT**

## I. <u>INTRODUCTION</u>

- 1. This matter came up for hearing as a result of a petition filed by CoxCom, Inc., d/b/a Cox Communications ("Cox") on November 15, 2000, in which Cox requested the Division of Public Utilities and Carriers ("Division") to approve its existing institutional/industrial network ("I-Net") arrangements in Rhode Island.
- 2. In that petition, Cox further requested that the Division either: (a) expressly recognize Cox's Full Service Network ("FSN") as an alternative technological means of making available an I-Net in place of a physically separate I-Net pursuant to Section 7.3(d) of the Division's Rules Governing Community Antenna Television Systems (1981), as amended (the "Cable Rules") or (b) pursuant to Section 7.1(b), waive portions of Section 7.3 of the Cable Rules so as to permit Cox to make available certain video and data services over its FSN.
- 3. Cox proposed that if the Division approved its FSN as an alternative technological means of making available an I-Net or granted it a waiver, then it would offer I-Net video and data capabilities to specified user groups in accordance with a proposal

submitted to the Division on July 14, 2000, and a summary of that proposal dated October 12, 2000, and maintain its existing, currently used I-Net facilities.

- 4. The Advocacy Section of the Division ("Advocacy Section") retained independent technical and legal consultants to assist its review of Cox's petition, the related proposal and summary, the technical characteristics of the FSN, the capability of the FSN to provide network capacity and services, and the public benefits and drawbacks of Cox's proposal.
- 5. Public hearings on Cox's petition were held on June 27, June 28, December 3, and December 10, 2001. Public comments were received, testimony was taken from experts and other witnesses and exhibits were introduced in evidence. Lastly, a demonstration of Cox's existing I-Net and the proposed technologies was conducted at Woonsocket High School on December 3, 2001.
- 6. After engaging in extensive negotiations, Cox and the Advocacy Section enter into this Settlement Agreement in accordance with Rule 27(b) of the Division's Rules of Practice and Procedure.
- 7. Cox and the Advocacy Section attest below that this Settlement Agreement is reasonable, in the public interest and in accordance with law and regulatory policy.

## II. GENERAL TERMS OF SETTLEMENT AGREEMENT

1. <u>Waivers</u> - Pursuant to Section 7.1(b) of the Cable Rules, Cox and the Advocacy Section recommend that the Division grant Cox a permanent waiver of Section 7.3(a), (b), (c), (d), (e) and (f) of the Cable Rules in Service Area Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 13. In lieu of complying with Section 7.3, Cox shall be bound by the terms and conditions of this Settlement Agreement.

#### 2. Certificates

- a. Cox and the Advocacy Section will prepare and forward to the Division for issuance appropriate proposed amended certificates for Service Areas 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 13 within ninety (90) days of the date of the Order of the Division approving this Settlement Agreement.
- b. The terms of this Settlement Agreement shall be restated and incorporated by reference into each proposed amended certificate(s) that is/are submitted to the Division.
- 3. Prior I-Net Waivers And Terms And Conditions The terms and conditions of this Settlement Agreement and the Division's Order in this proceeding shall provide for the manner in which Cox makes available, operates and maintains the Virtual B Network (hereinafter defined) throughout each Service Area in Rhode Island in which it is authorized to operate. These terms shall supersede all prior terms and conditions of any prior Division order and all prior orders, representations, testimony and exhibits applicable to Cox or its predecessors in interest with regard to the making available, operating or maintaining an I-Net in each Service Area.

#### 4. Virtual B Network Costs Assumed By Cox

- a. The signal processing equipment within the FSN, as well as the trunk and distribution system components of the Virtual B Network, will be constructed at Cox's expense.
- b. A Standard Installation (hereinafter defined) for the Virtual B Network will be made available at Cox's expense to each qualified Eligible User (hereinafter defined) whose Authorized Representative has submitted an installation request on its behalf.

# 5. <u>Virtual B Network Technical Capability</u>

- a. The Virtual B Network will be, at a minimum, technically capable of providing the equivalent of twenty-one (21) downstream channels on frequencies above one hundred sixty-eight megahertz (168 MHz) to all Eligible Users within a Service Area.
- b. The Virtual B Network will be, at a minimum, technically capable of providing the equivalent of twelve (12) upstream television channels on frequencies between five and one hundred and eight (5 and 108 MHz), from all Eligible Users within a Service Area.
- c. Channels may be counted on a per node basis within a Service Area for the purposes of assessing the Virtual B Network's technical capability within that Service Area.

# III. SPECIFIC TERMS AND CONDITIONS OF SETTLEMENT AGREEMENT

#### 1. Definitions

- a. The term "Agreed To Rates," as used herein, means the schedule of Cox's rates for Virtual Area Network and/or internet service speeds over 128 Kbps symmetrical. The Agreed To Rates are included in a Schedule of Rates, Fees and Charges attached hereto and restated and incorporated herein by reference as "Exhibit 1."
- b. The term "Associated Internet Services," as used herein, means internet services, other than cable modem-based internet service, such as e-mail and web hosting.
- c. The term "Authorized Representative," as used herein, means the officially designated contact person(s) of a municipality (or of the State Eligible Users) or his/her officially appointed designee who is responsible for applying for Virtual B Network installation and activation from Cox on behalf of one or more Eligible Users, purchasing

Equipment and Time and Materials Services, and managing Eligible User use of the Virtual B Network. Within each municipality in a Service Area, there shall be the following Authorized Representatives: (i) the School Superintendent or his/her designee having coordination responsibility for all public school buildings; (ii) Town Manager, Mayor or other Chief Executive Officer or his/her designee, having coordination responsibility for all other municipal buildings, including but not limited to, all city and town halls, all police and fire stations and all public libraries; and (iii) as to Virtual B Network Video Services only, a designee or designees appointed by the Administrator and having coordination responsibility for other significant private community institution groups, such as hospitals and religious institutions. On a statewide basis, there shall be one (1) Authorized Representative designated by the Administrator of the Division after consultation with the appropriate State officials.

- Network, means all State and municipal buildings, including but not limited to, all city and town halls, all police and fire stations, all public hospitals, all public libraries, all public schools, and all public universities and colleges. The term "Eligible User," when used in reference to the Virtual Video Network, shall also mean any other significant community institutions that the Administrator may designate, such as private and parochial schools, private universities and colleges, and private hospitals and religious institutions. When used in reference to the Virtual Data Network, the term "Eligible User" shall mean all State buildings and all municipal buildings, including but not limited to, all police and fire stations, all public libraries, and all public primary and secondary schools.
- e. The term "Equipment," as used herein, means all data and video equipment, including but not limited to, all cameras, monitors, routers, modulators, cabling,

televisions, personal computers, servers, terminals and cable modems that must be connected to the Virtual B Network from and after the termination point of a Standard or Non-Standard Installation. A list of the principal Equipment that Eligible Users are responsible for purchasing, installing, operating and maintaining, and the estimated costs of such Equipment, is contained in "Exhibit 11" to this Settlement Agreement and restated and incorporated herein by reference.

- f. The term "Fully Operational," as used herein, means operating in fact and at performance levels customary for such technology.
- g. The term "Implementation Commencement Date," as used herein, shall be the date immediately following the completion of the Ramp-Up Period.
- h. The term "Minimum Monthly Installment Requirement," as used herein, shall mean: if requested by Authorized Representatives, the completion of twenty (20)

  Standard Installation requests per month commencing from the Implementation

  Commencement Date.
- i. The term "Miscellaneous Items," as used herein, means the reasonable costs associated with returned check fees, late fees and similar charges.
- j. The term "MPOE," as used herein, means the closest practicable point on an Eligible User's building where wiring can enter the building from Cox's FSN.
- k. The term "Non-Standard Installation," as used herein, means all installations that are not Standard Installations.
- 1. The term "Order," as used herein, means the final Order of the Division approving this Settlement Agreement.

- m. The term "Ramp-Up Period," as used herein, shall mean the 180-day period immediately following the effective date of the Order.
- n. The term "Standard Installation," as used herein, means the provision of a connection (aerially or via existing on premises, unobstructed conduit to which Cox is afforded access without charge) equal to or less than one hundred and fifty (150) feet as measured from the nearest tap on the FSN to the MPOE. A Standard Installation shall also include the installation and termination of the internal wiring from the MPOE to an outlet, existing wire closet, or other termination point located not more than twelve (12) feet within the building.
- o. The term "Service Area," as used herein, means those areas within Rhode Island designated by the Division as CATV Service Areas pursuant to its authority under R.I.G.L. § 39-19-6 and the Cable Rules. As currently configured, Rhode Island is divided into those Service Areas set forth in the document attached hereto and restated and incorporated herein by reference as "Exhibit 2."
- p. The term "Time And Materials Services," as used herein, means all services that Eligible Users may purchase from Cox after the installation of a Standard or Non-Standard Installation in order to alter, add to, or maintain a Fully Operational Virtual B Network, including but not limited to, all services for troubleshooting problems, add/move/reconnect additional outlet, and change of service.
- q. The term "Virtual B Network," as used herein, consists of the Virtual Video Network and/or Virtual Data Network (Option I) or Virtual Data Network (Option II).
- r. The term "Virtual B Network Video Services," as used herein, means:

  (i) one way point-to-point video transmissions and one way point-to-multi-point video

transmissions of video signaling (e.g., programming such as instructional programming) originated by an Eligible User at its location and transmitted over the Virtual B Network between, or among and between, Eligible Users within a municipality or Service Area for viewing by the receiving Eligible Users at their locations on a closed loop basis; and (ii) video transmissions originating from an Eligible User's location that are transmitted upstream over Cox's FSN and then downstream on digital paths and/or on a public access channel of the residential cable network within a municipality or Service Area. With respect to State Eligible Users, Virtual B Network Video Services shall have the same meaning as above, but shall be available for origination, transmission and receipt by State Eligible Users at their locations within the State of Rhode Island on digital paths and/or a statewide interconnect channel.

- s. The term "Virtual Data Network," as used herein, is the network over which Cox will provide a Virtual Area Network ("VAN") (Option I) or cable modem-based internet service (Option II), to Eligible Users.
- t. The term "Data Services," as used herein, comprise VAN Services and cable modem based internet services provided via the Virtual Data Network.
- u. The term "Virtual Video Network," as used herein, is the network over which Cox shall provide Virtual B Network Video Services to Eligible Users.

# 2. <u>Statutory And Regulatory Compliance; Reservation Of Rights</u>

- a. In making available, operating and maintaining the Virtual B Network to and for Eligible Users, Cox will remain subject to, and comply with, state and federal law, all Orders of the Division, the Division's Rules of Practice and Procedure and the Cable Rules.

  Except as agreed to in this Settlement Agreement, Cox reserves all rights and remedies afforded to it under state and federal law, including all Orders of the Division, the Division's Rules of Practice and Procedure and the Cable Rules.
- b. Notwithstanding the foregoing, the parties acknowledge that Cox initiated the proposal to provide cable-modem services as a component of this Settlement Agreement, and Cox waives any claim that this Settlement Agreement is not enforceable due to any limitations on franchise authority of the Division over cable modem services, including any limitations created by the decision of the Federal Communications Commission entitled "In the matter of Inquiry Concerning High-Speed Access to the Internet Over Cable Facilities," GN Docket No. 00-185, CS Docket No. 02-52, FCC 02-77, Released March 15, 2002, as may be modified from time to time. Such waiver by Cox shall apply solely for purposes of this Settlement Agreement and not for any other purpose and shall not preclude Cox from taking any position in any other matter concerning the Division's legal authority to regulate cable modem internet service.

#### 3. <u>Virtual B Network</u>

a. Cox shall make available, operate and maintain for Eligible Users a

Virtual B Network in each Service Area in which it operates a cable system in Rhode Island,
subject to the terms and conditions of this Settlement Agreement, and as described in the

technical description and generally depicted in the diagrams which are attached hereto and restated and incorporated herein by reference as "Exhibit 3."

- b. Following the Ramp-Up Period, an Authorized Representative may request Cox to provide his/her Eligible Users with Virtual B Network capabilities. Each request shall be made in writing and submitted to Cox on the form attached hereto and incorporated herein by reference as "Exhibit 4." Cox will attempt to process all requests on a first-come, first-served basis. Cox will exercise its best efforts to render Eligible Users' Virtual B Networks Fully Operational within ninety (90) days from the date of its receipt of an Authorized Representative's request, subject to and provided that Eligible Users and Authorized Representatives have complied with the following conditions: (i) Eligible Users and Authorized Representatives have previously acquired the necessary Equipment; (ii) the Minimum Monthly Installation Requirement has not already been filled in the month that the Authorized Representative's request is due to be completed; (iii) Eligible Users and Authorized Representatives have appropriately planned and coordinated the Eligible Users' use of their Virtual B Network; and (iv) Authorized Representatives have provided Cox with a list of all Eligible User locations within their municipality (or the State in the case of the State Authorized Representative). An Installation Request Process Flow Overview is attached hereto and restated and incorporated herein by reference as "Exhibit 5."
- c. If the Minimum Monthly Installation Requirement has been filled in the month that an Authorized Representative's request is due to be completed, then Cox shall render the Eligible User's Standard Installation Fully Operational in the next month that the Eligible User's request can be applied to satisfy the Minimum Monthly Installation

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Requirement. This provision shall not preclude Cox from filling the Eligible User's Standard Installation request within a shorter time frame than heretofore specified.

- d. Authorized Representatives are required to execute a Virtual B Network Service Agreement on behalf of Eligible Users. An illustrative Service Agreement is attached hereto as "Exhibit 6." An Eligible User shall also sign a Virtual B Network Service Agreement if necessary for a valid procurement of services by the Eligible User.
- e. Authorized Representatives and/or Eligible Users shall be subject to an Acceptable Use Policy. An illustrative Acceptable Use Policy is attached hereto as **Exhibit 9** to this Agreement. Cox shall notify the Division and Authorized Representatives and Eligible Users at least thirty (30) days in advance of any revisions to the Acceptable Use Policy.

#### 4. Virtual Video Network

- a. Cox shall provide Eligible Users with a Virtual Video Network, which shall include, but will not be limited to, the following components:
- b. Each node in the FSN shall have not less than one (1) six (6) MHz analog upstream channel and not less than (3) downstream digital paths to provide Eligible Users with Virtual B Network Video Services. A public access channel (or interconnect channel in the case of the state network) may be used in addition to the downstream digital capacity.
- c. The downstream paths in each node shall consist of one (1) Service Area-wide path and two (2) municipal-wide paths for each municipality (three (3) statewide paths in the case of the State's Virtual Video Network).
- d. Eligible Users will be required to purchase, install and maintain all Equipment needed within their buildings in order to make use of the Virtual Video Network,

except to the extent that Cox has agreed to provide Equipment at its own expense under Part III of this Settlement Agreement. A list of the principal Equipment that Eligible Users will have to purchase, install and operate, along with the estimated cost of each piece of Equipment, is contained in "Exhibit 11" to this Agreement and incorporated herein by reference.

#### 5. Virtual Data Network

- a. General At an Authorized Representative's election, Cox shall provide either Option I or Option II of the Virtual Data Network to all Eligible Users for whom such Authorized Representative has coordination responsibility as described in Part III, Section 1(c) of this Settlement Agreement and for whom a request for such service has been made by such Authorized Representative pursuant to Part III, Sections 3 and 10 of this Settlement Agreement. For example, within a municipality, the Authorized Representative for public school buildings shall have the right to elect Option I or Option II for use at all public school buildings for which Virtual Data Network services have been requested, and the Authorized Representative for all other municipal buildings shall have the right to elect Option I or Option II for use at all other municipal buildings for which Virtual Data Network services have been requested. Similarly, the Authorized Representative for the State having coordination reponsibility for State locations shall have the same right of election.
- b. Option I consists of connecting multiple Eligible User locations within a municipality (or the State in the case of State Eligible Users) together to create a Virtual Area Network ("VAN") that includes, but is not limited to, the following components: (i) the VAN will provide Eligible Users, at no charge, with point-to-point data transport at a rate of at least 128 Kbps symmetrical or, at such speeds in excess of 128Kbps symmetrical as Cox may designate; and (ii) Eligible Users may purchase data transport at

speeds in excess of 128 Kbps symmetrical or such higher speed that Cox has designated at the Agreed To Rates and may also purchase Associated Internet Services and cable modem-based internet service at applicable rates. Option I does not include internet access or other network services, such as email and web hosting. Internet access and other network services may be purchased from Cox or another provider who will terminate the internet service provider access to the Eligible User's network. Option I also includes one cable modem, per building, that is owned and maintained by Cox at no charge to an Eligible User; provided, however, that an Eligible User may, at its option, elect to purchase, own and maintain cable modem (s) in place of a Cox-provided cable modem so long as such Eligible User-supplied cable modem satisfies technical specifications of Cox and is compatible with Cox's Virtual Data Network.

c. Option II - Option II consists of a cable modem-based internet service, Cox High Speed Internet Service, or such other comparable internet service as Cox selects, that will be terminated at a single point at an Eligible User location and that includes, but is not limited to, the following components: (i) Eligible Users, at no charge, are entitled to cable modem-based internet service at upstream/downstream speeds of 128 Kbps symmetrical, or, at such speeds in excess of 128 Kbps symmetrical as Cox may designate; (ii) Cox is entitled to charge Eligible Users for cable modem-based internet service at speeds in excess of 128 Kbps symmetrical or such higher speed that Cox has designated under (c)(i) above in accordance with the Agreed To Rates; (iii) one (1) free static Internet Protocol ("IP") address per Eligible User network; and (iv) Cox will not charge Eligible Users for terminals behind a proxy server if one is used. Cox does not include a modem with Option II service. The Eligible User is responsible for owning and maintaining its own cable modem for use with Option II service.

- d. Eligible Users will be required to purchase, install and maintain certain Equipment in order to use and operate the Virtual Data Network, except as otherwise specifically provided for under this Settlement Agreement. An illustrative list of the principal Equipment that Eligible Users will need to purchase, install and operate (depending upon their individual service requirements and budget), along with the estimated cost of each piece of Equipment, is contained in Exhibit 11 to this Settlement Agreement.
- e. The services provided for under Option I and Option II are considered by the parties as an integral part of their Settlement Agreement and do not constitute offerings by Cox or any affiliate of Cox of those services to the general public.

## 6. <u>Video And Data Service</u>; Agreed To Rates And Other Charges

- a. Cox shall provide Virtual B Video Network Services to Eligible Users, free of all rates, fees and charges; provided, however, Cox may charge Eligible Users for two-way point-to-point and two-way point-to-multipoint transmissions of video between Eligible User locations within a municipality and Service Area (or in the case of State Eligible Users, within the State).
- b. Cox shall provide cable modem based internet service (Option II of the Virtual Data Network) to Eligible Users at 128 Kbps symmetrical (or at such higher speed as Cox may designate), free of all rates, fees and charges. Under Option II, Cox may charge Eligible Users for cable modem-based internet or related data services at speeds in excess of 128 Kbps symmetrical (or such higher speed as Cox may designate) at the Agreed To Rates.
- c. Cox shall provide directly or through an affiliate data transport capacity at speeds of at least 128 Kbps symmetrical (Option I of the Virtual Data Network) to Eligible

Users free of all rates, fees and charges. Under Option I, Cox may charge Eligible Users for transport speeds in excess of 128 Kbps symmetrical at the Agreed To Rates.

- d. Cox may charge Eligible Users for Non-Standard Installations, Time And Material Services, Equipment purchased from Cox, Associated Internet Services and Miscellaneous Items as provided in this Agreement.
- e. Cox guarantees the Agreed To Rates for cable modem based services at transport speeds in excess of 128 Kbps symmetrical over the Virtual Data Network to all Eligible Users for the three (3) year period from the date of the Order. Thereafter, upon thirty (30) days' notice to the Authorized Representatives and to the Division, Cox may adjust these rates once during every eighteen-month period thereafter. However, Cox will continue to discount the revised rates at least twenty (20) percent below those of comparable standard commercial offerings.
- f. The Agreed To Rates and any revisions thereof are intended to act as a price ceiling only. In the event that the prices of comparable commercial offerings for internet service or transport speeds decrease below those reflected by the Agreed To Rates, Cox agrees to pass those prices decreases on to Eligible Users on a proportionate basis in order to ensure that the Agreed To Rates remain at least 20% below those of comparable commercial offerings.
- g. <u>Time And Materials Services</u> Upon request, Eligible Users may purchase Time and Materials Services from Cox on the same basis as retail cable subscribers.

  A Service Request Process Flow Overview is attached to this Settlement Agreement as **Exhibit**7 and incorporated herein by reference.

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h. <u>Limitations On Charges</u> - At no time shall Cox externalize, line item, bill and/or otherwise pass-through any costs associated with the Virtual B Network to its residential subscribers. Cox shall not externalize, line item, bill or otherwise pass through any costs associated with the Virtual B Network to Eligible Users except that Cox may pass through to Eligible Users: (i) the Agreed To Rates; (ii) fees and charges for Non-Standard Installations (calculated pursuant to Part III, Section 8(b) following), Time And Material Services, Equipment purchased from Cox, Associated Internet Services and Miscellaneous Items as provided in this Settlement Agreement; and (iii) fees and charges for the provision of two way Virtual B Network Video Services, as provided for in Section 6(a) above. The fees and charges for Non-Standard Installations, Time And Material Services, Equipment purchased from Cox, Associated Internet Services and Miscellaneous Items are not guaranteed and may change from time to time. Cox shall maintain and keep current its Schedule of Rates, Fees and Charges (Exhibit 1) with the Division.

#### 7. Credit Option for Data Services

a. Within 180 days after the Implementation Commencement Date, Cox shall make available to Eligible Users of Data Services a credit option whereby an Eligible User may elect to decline a Data Service made available by Cox at no cost and apply the value of that Data Service (determined to be eighty percent (80%) of the retail, non-discounted rate for that service offered by Cox or an affiliate of Cox in Rhode Island)toward the cost of a Data Service provided by Cox on a fee basis. For example, an Eligible User may decline a free high-speed cable modem service (128 Kbps VAN or internet) and apply a credit toward the cost of a higher speed cable modem service (256 Kbps VAN or internet) provided by Cox

- b. The credit option will be offered in each municipality. Each municipality shall have two user groups: (i) schools and (ii) other. The "schools" group shall consist of primary and secondary public schools within the municipality. The "other" group shall consist of municipal administrative offices, police, fire and other municipal building locations. Any issues as to the classification of an Eligible User shall be decided by the Administrator. State Eligible Users shall constitute a separate "State" user group. The Authorized Representative of any Eligible User within the "schools" group or "other" group within a municipality may transfer a credit to another Eligible User within the "schools" group or "other" group within the same municipality (intra-user group transfer). Credit transfers between the two municipal user groups also shall be permitted (inter-user group transfer) by written agreement between the Authorized Representatives of each user group. No transfers of credits between Eligible Users in different municipalities shall be permitted. In the case of the "State" user group, this transfer limitation shall not apply.
- directly or by virtue of transfers of credits from other Eligible Users, the rate to be charged by Cox for a fee-based Data Service shall not be less than fifty percent (50%) of the retail, non-discounted rate for such service offered by Cox or an affiliate in Rhode Island. Any credits in excess of the amount that is available for application to a Cox fee-based Data Service may be used by the Eligible User at a later time or transferred to another Eligible User in accordance with the provisions of Part III, Section 7(b) above upon written notice to Cox. Attached as "Exhibit 8" is a schedule illustrating the operation of the credit mechanism and the minimum rates to be charged for a fee-based Data Service after the application of the maximum amount of credit available toward that service under this credit option.

- d. Credits may not be applied toward telecommunications service provided to the general public by Cox Rhode Island Telcom, LLC.
- e. Services provided by Cox that are subject to a credit shall also be applicable state, federal and local taxes and governmentally imposed fees.
- f. Credits available under Section 7 above shall not be applicable to Non-Standard Installations or Time and Materials Services.
- g. Cox shall track the utilization of credits by Eligible Users and prepare a report for the Division on such utilization on an annual basis. Such report may be consolidated with another annual report that the Company is required to file with the Division or submitted as a separate report.

#### 8. Installations

- a. <u>Free Standard Installations</u> Upon a request of the Authorized

  Representative on behalf of an Eligible User, Cox will provide a Standard Installation to each

  Eligible User location free of charge.
- b. <u>Charges For Non-Standard Installations</u> For Non-Standard Installations, Cox is entitled to charge Eligible Users on a time and materials basis for the amount by which the cost of the Non-Standard Installation exceeds the cost of a Standard Installation for the same location.
- c. <u>Alternative Vendors For Non-Standard Installations</u> In the event that an Eligible User requires a Non-Standard Installation, Cox shall provide the Authorized Representative in writing with the names and telephone numbers of two (2) qualified, alternate, unaffiliated vendors who can perform the installation. The Eligible User may select Cox or one of the alternate vendors to perform the installation. If an alternative vendor is used, Cox

shall not be required to credit against the cost of the Non-Standard Installation, the cost of the Standard Installation.

- d. Written Estimate For Non-Standard Installations Cox will provide the Authorized Representative with an itemized, written estimate of all charges associated with a Non-Standard Installation to be provided by Cox prior to performing said work including on such estimate the credit for the cost of the Standard Installation for the same location. Cox will exercise its best efforts to provide Non-Standard Installations within the time frame required for the performance of Standard Installations.
- e. <u>Outlet Location</u> Prior to providing Eligible Users with a Standard or a Non-Standard Installation, Cox will discuss the location(s) of the outlet or outlets with the Eligible User.

## 9. Additional Obligations Of Cox

a. <u>Maintenance Of Logs</u> - Cox shall maintain a written log of all Authorized Representative requests for Virtual B Network site installation and activation. The log shall contain the following information: (i) the identity of each Authorized Representative and location(s) who has/have requested installation of the Virtual B Network, (ii) the date when each Authorized Representative's request was received by Cox, and (iii) the date when the work relating to each request was completed. A copy of the Log shall be forwarded by Cox to the Division within fourteen (14) days after the expiration of the ninety (90) days following the Implementation Commencement Date, and quarterly, thereafter, for a period of two (2) years from the date of the Order and thereafter on a semiannual basis unless no longer required by written permission of the Division.

- b. <u>Vendor And Equipment List</u> Cox shall maintain and provide

  Authorized Representatives and the Division with a list of independent vendors and vendor contacts (including information such as telephone numbers) from whom Eligible Users can purchase network compatible Equipment and Time And Materials Services other than from Cox, as well as a list of the appropriate Equipment necessary for them to use the Virtual B Network. Cox shall update the list as necessary to ensure that Eligible Users can purchase Equipment that is compatible with Cox's network and otherwise appropriate. Upon request, Cox shall provide Eligible Users with industry-approved standards and Cox standards to aid Eligible Users in purchasing Equipment from vendors other than from Cox.
- c. <u>Virtual B Network Coordinator</u> At no charge to Eligible Users, Cox shall employ one (1) Virtual B Network Coordinator whose duties will include, but will not be limited to, coordinating Eligible Users' use of the Virtual B Network, handling complaints, and serving as a point of contact between Cox, Authorized Representatives, and the Division, answering basic technical questions from Eligible Users, providing basic technical assistance to Eligible Users regarding video and data Equipment and Virtual B Network Video Services, the Virtual Data Network (Options I and II) and preparing training and instruction materials.
- d. <u>Staffing</u> Cox will provide a level of staffing that is necessary to effectively administer the Virtual B Network. As the demand for staffing increases, Cox will employ additional staff to serve that demand. Cox will coordinate with the Division and Authorized Representatives to ensure that staffing levels remain adequate. Cox may utilize independent contractors to satisfy its staffing requirements associated with the Virtual B Network.

- e. Training Upon request by an Authorized Representative, Cox will provide training classes concerning the operation of Virtual B Network Video Services, the Virtual Data Network (Options I and II), and Associated Internet Services and Equipment commencing ninety (90) days following the date of the Order and thereafter, quarterly, for a period of three (3) years from the date of the Order. After the three (3) year period has expired, Cox will provide training classes at least two (2) times per year upon the request of one (1) to three (3) Authorized Representatives, or, at any time, when Cox has received training requests from four (4) or more Authorized Representatives. The training classes shall be scheduled at times and places that are reasonably convenient to Eligible Users whom Cox anticipates will attend the classes. The Virtual B Network Coordinator shall notify anticipated attendees of the time and place of the training classes. Cox may employ consultants and use vendor personnel to perform certain training activity; provided however, that Cox shall remain responsible for the provision of training required under this Settlement Agreement.
- f. Trunk, Distribution Plant And Signal Processing Equipment Within The

  FSN Cox shall be responsible for providing, operating and maintaining all trunk, distribution

  plant and signal processing equipment for the operation of the Virtual B Network up to the

  termination point of a Standard or Non-Standard Installation.
- g. <u>Telephone Contact</u> From and after the Ramp-Up Period, Cox shall designate a telephone number (which may be answered by Automatic Response Unit (ARU)/Interactive Voice Response (IVR)) for Virtual B Network questions from Eligible Users and Authorized Representatives. The telephone number shall afford Authorized Representatives and Eligible Users with access to the Virtual B Network Coordinator, and shall be provided to inquiring Authorized Representatives and Eligible Users and to the

Division. If the telephone number is answered by ARU or IVR, one selection will provide callers with a "live voice selection" (which shall be answered by a live voice during normal business hours) for the purpose of responding to Virtual B Network-related questions.

- h. <u>Electronic Mail</u> From and after the Ramp-Up Period, Cox shall designate an electronic mail ("e-mail") address or other electronic interface for inquiring Authorized Representatives and Eligible Users to use so that they may submit pre-request inquiries to Cox about the Virtual B Network, Time And Materials Services and Equipment.
- i. <u>Use Of Telephone And E-Mail Contacts</u> Eligible Users may contact Cox with inquiries or questions regarding the Virtual B Network by means of the telephone number or e-mail established pursuant to this Settlement Agreement. However, Virtual B Network installation requests, service requests or any other requests must be initiated and pursued only through and by an Eligible Users' Authorized Representatives.
- j. Outreach Program During the Ramp-Up Period, after consultation with the Division, and commencing no later than ninety (90) days from the date of the Order, Cox shall implement a mutually acceptable outreach plan which will include, but will not be limited to, the following: (i) maintaining copies of instructional manuals and instructions, and preparing instructional materials as needed, to facilitate use of the Virtual B Network and Equipment; (ii) not less than three (3) times per year for a period of three (3) years from the date of the Order, publicizing (by mailings, seminars, and other means) the availability of the Virtual B Network, its capabilities, and the availability of instructional materials and times and places of training classes, instructions and other information relating to the implementation of the Virtual B Network; (iii) conducting four (4) seminars regarding the Virtual B Network and at which program materials, including promotional information,

forms, rates, terms and conditions, will be made available; and (iv) establishing and maintaining a web-page which will contain information relating to the establishment and maintenance of the Virtual B Network, forms, frequently asked questions and links to related information.

- k. <u>Demonstration Municipalities</u> During the Ramp-Up Period and in no case for a period of less than six (6) months, Cox shall provide three (3) municipalities with Fully Operational Virtual B Network demonstration sites. One Demonstration Municipality shall demonstrate the Virtual Video Network, one shall demonstrate the Virtual Data Network (Option I) and one shall demonstrate the Virtual Data Network (Option II). The Demonstration Municipalities and the scope of the Virtual B Network Video Services and Option I and Option II Virtual Data Network services exhibited thereby shall be selected by Cox after consultation with the Administrator, and shall be established and equipped at Cox's expense.
- l. <u>Fees, Costs And Expenses</u> Cox agrees to reimburse the Division for all reasonable attorney's and expert fees, costs and expenses incurred by the Division in connection with Docket D-2000-C-7 in accordance with the provisions of R.I. Gen. Laws § 39-19-14(b) and in no event in excess of forty thousand dollars (\$40,000) per calendar year through the date of the Order. Disputes arising in connection with the reimbursement of fees, costs and expenses shall be resolved pursuant to the procedure set forth in R.I. Gen. Laws § 39-19-14(c), as amended.
- m. <u>Signal Quality</u> Cox shall maintain Virtual Video Network signal quality as prescribed by the rules and regulations of the Federal Communications Commission, including 47 C.F.R. § 76.701, et seq. and shall provide proofs of performance tests if requested

by the Division. Cox shall maintain Virtual Data Network transmissions in accordance with reasonable industry standards, and, upon request, shall provide and advise the Division of such standards along with an explanation of the basis for their implementation.

- n. Annual Virtual B Network Report Cox shall provide the Division, on an annual basis, by a date designated by the Administrator, a written report regarding its

  Virtual B Network usage, maintenance and performance, including but not limited to,
  complaints and complaint resolutions, signal quality data, video and data signal proofs of
  performance, actual staffing, training assistance, community outreach measures, actual Virtual

  B Video and Data Network usage by Eligible Users, and any other matter of which Cox
  believes the Division should be informed.
- o. <u>Signal Outages</u> Cox will undertake its best efforts to remedy signal outages, material interference and/or other technical problems that arise in connection with the Virtual B Network as soon as practicable after Cox receives notice from the State, a municipality, an Eligible User or the Division regarding the signal outage, material interference and/or other technical problem.
- Eligible Users' And Authorized Representatives' General Obligations

  Eligible Users and/or Authorized Representatives desiring to make use of the

  Virtual B Network shall execute an I-Net Services Agreement, as provided for in Part III,

  Section 3(d) of this Settlement Agreement. The obligations of Eligible Users and/or

  Authorized Representatives under the I-Net Services Agreement shall include, but are not

  limited to the following:
- a. Eligible Users and Authorized Representatives shall not give, resell, lease or otherwise distribute video, data or transport capacity of the Virtual B Network, engage

in conduct that materially impacts the safety or reliability of the FSN or otherwise engage in unacceptable use of the FSN as defined in the Acceptable Use Policy.

- b. Eligible Users and Authorized Representatives shall be responsible for purchasing all Equipment and Time and Materials Services, except as provided for under Part III, Sections 9(k) and 12(d). Eligible Users and Authorized Representatives must ensure that their Equipment is compatible with Cox's FSN.
- c. Cable modems used by Eligible Users in connection with the Virtual

  Data Network must be DOCSIS compliant.
- d. Eligible Users and Authorized Representatives are required to engage in appropriate planning and coordination of their Virtual B Network participation prior to forwarding an installation request to Cox. Such planning and coordination will include, but will not be limited to: (i) determining Eligible User locations; (ii) determining community or other Virtual B Network applications; (iii) selecting compatible service options available over the Virtual B Network; (iv) selecting, purchasing and arranging for the installation of compatible Equipment; and (v) coordinating installation requests and the order thereof.
- e. Upon reasonable notice, an Eligible User will be required to provide

  Cox with access to its site in order to permit Cox to conduct network monitoring and testing

  and to ensure that quality of service objectives are satisfied.

#### 11. Existing I-Net Locations And Programs Not Affected

a. The locations in Rhode Island that Cox has identified as possessing preexisting B-Cable capacity by means of separate institutional network technology are set forth in

**Exhibit 10** to this Agreement and restated and incorporated herein by reference. Unless terminated by Order of the Division or by duly authorized written consent of the affected

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Eligible User, Cox will continue to operate and maintain all pre-existing B-Cable capacity at current levels. If any other locations are identified by Cox, it shall notify the Division and shall be obligated to operate and maintain these locations under the terms of this subsection.

- b. The terms of this Settlement Agreement do not and shall not be construed to apply to or revise, reduce or terminate the Cable in the Classroom and School Connections programs currently provided by Cox on a voluntary basis in Rhode Island.
- c. Unless terminated by Order of the Division, Cox shall continue to provide and maintain all equipment (including but not limited to providing and maintaining modulators and demodulators, cameras, etc.), services, personnel, and other support that the company currently provides to existing public, educational, and governmental channel video originations from existing origination sites.

## 12. Disputes

- a. Authorized Representatives and the Virtual B Network Coordinator shall exercise their best efforts to resolve all material issues arising as a result of or in connection with the making available, operation or maintenance of the Virtual B Network or the terms and conditions of this Settlement Agreement within thirty (30) days of receiving notice of the issue. If the issue is not resolved within the thirty (30) day time-period, the Authorized Representative or Cox may contact or file a complaint with the Division pursuant to the Division's Rules of Practice and Procedure. Nothing in this paragraph shall be construed to alter or abridge any rights afforded to Eligible Users or Cox under State or federal law.
- b. In the event that Cox or an Authorized Representative becomes aware that a Virtual Video Network is unable to accommodate the use by two or more Eligible Users

at the same time, then the appropriate Authorized Representative(s) and Cox shall exercise their best efforts to resolve the conflict within forty-eight (48) hours as follows: (i) by attempting to reschedule one (1) or more of an Eligible User's use of the Virtual Video Network, and (ii) if rescheduling does not resolve the conflict, by attempting to provide, at Cox's expense, one (1) or more of the Eligible Users with temporary use of appropriate Equipment to resolve the conflict.

- c. If programming conflicts become a source of repeated, unresolved disputes within a Virtual Video Network, at the request of the Division, Cox will explore implementing a permanent solution to resolve the conflicts, including but not limited to: (i) providing the affected location with the appropriate Equipment to correct the problem; (ii) constructing a direct fiber feed; or (iii) splitting the relevant node. Within sixty (60) days of such Division request, Cox shall provide the Division with a written report detailing the various solutions that will resolve the particular programming conflicts problem, the pros and cons of each solution and the costs associated with implementing each solution, and the specific solution recommended by Cox.
- d. Cox may, in a reasonable exercise of its discretion, determine that CODEC(s) and/or other Equipment should be deployed by Eligible Users to improve the efficiency of the Virtual B Network or to eliminate a specific programming conflict described above in Part III, Sections 12(b) and 12(c). In the event that deployment of CODEC(s) and/or other Equipment is necessary as a result of the exercise of such discretion by Cox, Cox shall install and maintain such CODEC(s) and/or other Equipment at its own expense. Cox shall exercise its best efforts to assure that the installation and maintenance of CODEC(s) and/or other Equipment does not materially adversely impact Eligible Users, including but not limited

to the following: (i) providing Eligible Users with adequate training in the operation of

CODECs and/or other Equipment to be deployed; (ii) providing Eligible Users with reasonable

notice of the deployment of the CODECs and/or other Equipment; and (iii) ensuring that the

installation and maintenance of the CODECs and/or other Equipment does not materially

adversely impact the quality of service of Virtual B Network Video Services, Data Services

and Associated Internet Services received by Eligible Users over the Virtual B Network.

13. Permitted Discontinuance of Virtual B Network Service - Within forty-eight

(48) hours of the discontinuance of service to an Eligible User, Cox shall notify the Division

and the appropriate Authorized Representative in writing of the discontinuance of such service.

14. Severability - If any paragraph, subparagraph, clause or term of this Settlement

Agreement is held invalid or unconstitutional by any court of competent jurisdiction, then the

offending portion shall be deemed separate, distinct and independent from the remaining

paragraph, subparagraph, clause or term hereof and the holding will not affect the validity of

those remaining portions.

15. Notices - Except as otherwise provided, all notices to be provided under this

Settlement Agreement, shall be forwarded by regular mail, postage prepaid, to:

COX:

Cox Communications

111 Comstock Parkway

Cranston, Rhode Island 02920

Attn: Virtual B Network Coordinator

Cox Communications cc:

111 Comstock Parkway

Cranston, Rhode Island 02920

Attn: Vice President, Government and Public Affairs

The DIVISION:

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Division of Public Utilities and Carriers

89 Jefferson Blvd.

Warwick, Rhode Island 02888

Attn: Associate Administrator (Cable Section)

or to such other address as either party shall designate by proper notice. Notices will be deemed given upon the date of actual receipt.

- 16. <u>Continuing Nature</u> The terms and conditions of this Settlement Agreement shall be binding on and inure to the benefit of the successors and assigns of the Division and Cox.
- 17. <u>Non-Waiver</u> The failure of either Cox or the Division to insist on the performance of any term or condition of this Settlement Agreement or to exercise any right or privilege hereunder, shall not be construed as a continuing or future waiver of such term, condition, right or privilege.
- 18. <u>Entire Agreement</u> The terms and conditions contained in this Settlement Agreement constitute the final expression of the parties' agreement and is the complete and exclusive statement of the terms of their agreement.
- 19. <u>Modification</u> The terms and conditions contained in this Settlement

  Agreement may be modified only by an Order of the Division. Cox further reserves all of its rights to oppose any such modifications and to propose modifications for consideration by the Division.
- 20. <u>Division Non-Approval Or Modification Of Agreement</u> In the event that the Division does not approve this Settlement Agreement, or modifies this agreement or any provision therein, then this agreement shall be deemed withdrawn and shall be null and void in all respects, unless the undersigned parties agree to such modifications or changes.

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- 21. Force Majeure If by reason of *force majeure* Cox is unable in whole or in part to carry out its obligations hereunder, Cox shall not be deemed in violation of the terms of this Settlement Agreement, the Division's Order in this proceeding, the Cable Rules or any of its Certificates during the continuance of such inability to perform. Cox shall notify the Division if is unable to perform its obligations hereunder, or any of them, by reason of force majeure. The term *force majeure* shall mean the following: lock out or other labor disputes; acts of God; acts of public enemies; shortage of materials; orders of any kind of the government of the United States of America or the State of Rhode Island or any of their departments, agencies, political subdivisions (excluding the Division or Commission) or officials, or any civil or military; insurrections; riots; epidemics; landslides; lightning; earthquakes; fires; hurricanes; storms; floods; washouts; droughts; arrests; civil disturbances; explosions; partial or entire failure of utilities; or any other cause or event not reasonably within the control of Cox.
- 22. Affiliates In the event that the provision of any service or Equipment by Cox to an Eligible User under this Settlement Agreement is carried out through any arrangement between Cox and an affiliate of Cox (including, but not limited to Cox Rhode Island Telcom, LLC or Cox Business Services), Cox represents that it has entered into this Settlement Agreement on its own behalf and on behalf of such affiliate(s). In the event of any final determination by a court or state or federal agency or a determination by Cox that any service provided to an Eligible User under this Settlement Agreement constitutes a common carrier telecommunications service that is subject to tariffing by the Rhode Island Public Utilities Commission, such service may be provided by Cox Rhode Island Telcom, LLC or any other duly authorized affiliate of Cox. Cox shall not contest the validity or enforceability of this Settlement Agreement or any provision thereof on the grounds of any such determination.

# IV. PROPRIETY OF SETTLEMENT AGREEMENT

| Each undersigned party attests that it believes that this Settlement Agreement is   |   |  |  |  |
|---|---|--|--|--|
| reasonable, in the public interest and in accordance with law and public policy.  |   |  |  |  |
| Dated at Warwick, Rhode Island this day of  | , 2002.   |  |  |  |
| ADVOCACY SECTION OF THE DIVISION OF PUBLIC UTILITIES AND CARRIERS By its attorney,  | COXCOM, INC., d/b/a COX<br>COMMUNICATIONS<br>By its attorneys,<br>MANDL & MANDL, LLP              |  |  |  |
| Leo J. Wold, # 3613<br>Special Assistant Attorney General<br>150 South Main Street<br>Providence, RI 02903<br>401-274-4400, ext. 2218 | Alan D. Mandl, Esq., #6590<br>10 Post Office Square-Suite 630<br>Boston, MA 02109<br>617-556-1998 |  |  |  |
| Of Counsel:   | Of Counsel:   |  |  |  |
| William August, Esq., <i>Pro Hac Vice</i> Epstein & August, LLP 101 Arch Street, Suite 900 Boston, MA 02110-1112 617-951-9909         | Kevin R. Horan, Esq. #2012<br>393 Armistice Blvd.<br>Pawtucket, RI 02861<br>401-726-6400          |  |  |  |

# SCHEDULE OF RATES, FEES AND CHARGES

# A. AGREED TO RATES (OPTION I AND OPTION II)

#### OPTION I - VIRTUAL AREA NETWORK - VAN SERVICES

| SERVICE                 | DESCRIPTION RATE/MONTH   | SVC COD | E        |
|-------------------------|--|---------|----------|
| 256 Kbps                | VAN-Layer 2 VPN application.<br>symmetrical No Internet. No IPs.<br>256 Kbps upstream data.<br>256 Kbps downstream data. | 14021   | \$71.00  |
| 384 Kbps<br>symmetrical | VAN-Layer 2 VPN application.<br>No Internet. No IPs.<br>384 Kbps upstream data.<br>384 Kbps downstream data.             | 14022   | \$111.00 |

#### *OPTION II - INTERNET SERVICES*

| SERVICE                 | DESCRIPTION<br>RATE/MONTH  | SVC CODE |          |
|-------------------------|--|----------|----------|
| 256 Kbps<br>symmetrical | Tiered bandwidth product. 256 Kbps upstream data. 256 Kbps downstream data. Includes 1 static IP address and 5 e-mail boxes. | 12331    | \$89.00  |
| 384 Kbps<br>symmetrical | Tiered bandwidth product. 384 Kbps upstream data. 384 Kbps downstream data. Includes 1 static IP address and 5 e-mail boxes. | 12339    | \$151.20 |
| 256Kbps/1.5<br>Mbps     | Tiered bandwidth product. 256 Kbps upstream data. 1.5 Mbps downstream data. Includes 1 static IP address and 5 e-mail boxes. | 12335    | \$199.00 |

#### **B.** OTHER FEES AND CHARGES

#### FEES AND CHARGES FOR ASSOCIATED INTERNET SERVICES

Each Additional IP Address \$10.00/month with a maximum of five (5)

E-Mail:

CoxMail Basic \$5.00/month; 10 Mb of email storage space

5 Megabyte file attachment restriction

CoxMail Premium \$25.00 installation charge will be waived if

CoxMail is installed at time of initial installation of data

service

\$10.00/month; 25 Mb of email storage space

Web Hosting \$5.00 for additional domain name hosting

FEES AND CHARGES FOR MISCELLANEOUS ITEMS

Returned Check Fee \$20.00

Late Fee [RESERVED]

## RHODE ISLAND CABLE SERVICE AREAS

| Service Area No. | <b>Geographical Boundaries</b>   |
|------------------|--|
| 1                | Central Falls Cumberland Lincoln North Smithfield Smithfield Woonsocket      |
| 2                | Providence<br>North Providence   |
| 3                | Cranston Foster Johnston Scituate  |
| 4                | East Providence  |
| 5                | Barrington<br>Bristol<br>Warren  |
| 6                | Coventry East Greenwich Warwick West Warwick                                 |
| 7                | Little Compton Middletown Newport Portsmouth Tiverton                        |
| 8                | Exeter Jamestown Narragansett North Kingstown South Kingstown West Greenwich |

| Service Area No. | Geographical Boundaries                              |
|------------------|--|
| 9                | Charlestown Hopkinton Richmond Westerly              |
| 10               | Pawtucket  |
| 11               | New Shoreham<br>[Cox Does Not Provide Cable Service] |
| 12               | [No Longer Exists]                                   |
| 13               | Burrillville<br>Gloucester                           |

# TECHNICAL DESCRIPTION AND DIAGRAMS OF THE VIRTUAL B NETWORK

The Rhode Island Virtual B Network Technical Description Overview - Cox will provide an institutional/industrial network in each of the Service Areas where Cox operates via the Full Service Network that it has deployed throughout the State of Rhode Island. This integrated network architecture is capable of providing data and video services to existing and future institutional and industrial users and is referred to as the Virtual B Network ("VBN").

#### Virtual Data Network Component of the VBN

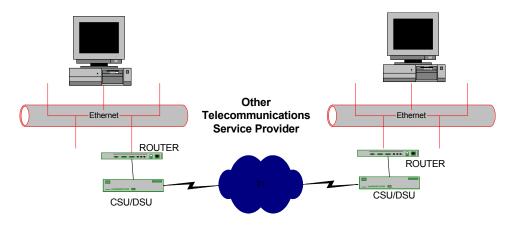
Under the terms of the Settlement Agreement, the Virtual Data Network component of the VBN provides Eligible Users with a data networking solution that will originate and terminate within each community or the State. Each Eligible User site must be equipped with a DOCSIS capable modem. The Virtual Data Network will have two service options available, Virtual Area Network (VAN) Service (Option 1) and Cable Modem Internet Service (Option 2). The Authorized Representative for public school locations and the Authorized Representative for other municipal locations shall have the right to request either Option 1 or Option 2 service for all of the Eligible Users for which it has coordination responsibility (e.g., all Eligible Users for which an Authorized Representative has submitted a service request will be provided with the same Option). There will be a maximum of two Eligible User networks per community (one educational and one other municipal). An Eligible User network within a community is defined as one or more eligible points within a community that are interconnected by either the VAN Service (Option 1) or Cable Modem Internet Service (Option 2).

Option 1-VAN Service - The VAN Service is a cable modem based networking solution used to connect local area network points, stand-alone computers, and other data devices equipped with a standard Ethernet network interface into a multi-point wide area network solution within the municipality/service area. The service enables Eligible Users to connect remote offices back to a main, (or, in the case of the State) regional, or statewide offices. What makes the VAN unique is that it is a more simplified network solution that provides a reliable, secure transit of data across the Full Service Network via an Ethernet based Layer Two connection as defined by the International Standards Organization. The number of devices connected to each modem at each Eligible User site are subject to the Technical Specifications documentation and interconnect requirements for VAN service. This documentation is available upon request made to Cox Communications. In order to receive Option I VAN Service, the Eligible User must use a modem provided, owned and maintained by Cox at Cox's expense (one modem per building location) or a modem purchased, owned and maintained by the Eligible User at its own expense, compliant with Cox-provided specifications and compatible with Cox's Virtual Data Network.

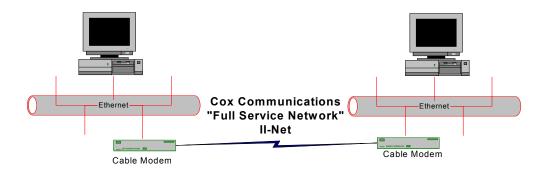
Option II - Cable Modem Internet Service - This service will be made available to selected Eligible User locations. Each Eligible User can connect the Cox selected Internet service to an existing network or a single stand-alone computer within the Eligible User's data network. In this case the Eligible User will provide the modem or other terminating hardware necessary to meet the Eligible User interconnect point via an Ethernet "10-Base T" standard interface (through a Standard Installation or Non-Standard Installation). Cox will also supply one (1) static IP at no charge across this interface. Additional IPs are available as defined in this document.

The VBN is designed to meet the application of extended secure Ethernet to remote offices in an Eligible User network configuration that might typically use Frame Relay, T1 or other telecommunications transport service to interconnect data points as demonstrated below. This architecture typically allows remote offices to be treated as if they are directly connected to the main, regional or statewide primary office LAN. The VBN also allows remote office locations to easily leverage centralized IT resources such as network servers, printers, and inter-net gateways via standard data interface points without the need for costly telecommunications terminating hardware such as CSU/DSU on T1s or NY1s on ISDN.

#### Sample Data Application Before Cox Provided Virtual B Network



#### Sample Data Application After Cox Provided Virtual B Network



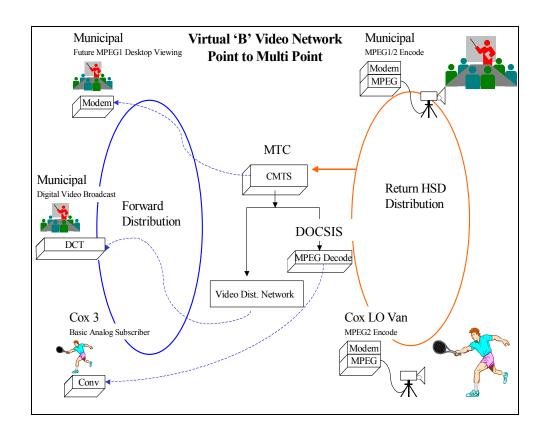
#### Virtual Video Network Component of the VBN

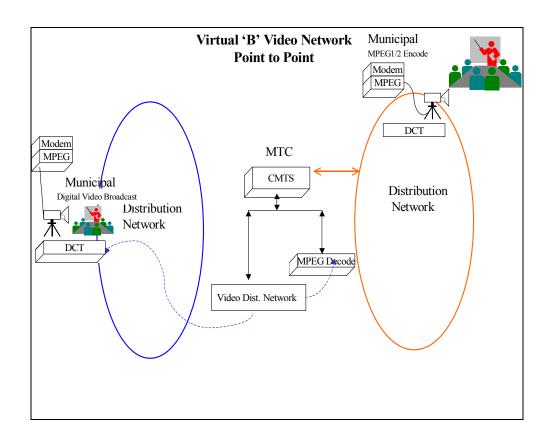
<u>Virtual B Network Technical Description "Video"</u> - The integrated Cox video solution consists of multiple applications primarily the ability to originate the Eligible User's video programming from an Eligible User location(s) and broadcast it back out to the Eligible User(s) audience either in the same Municipality or same Service Area over Cox Full Service Network. The Eligible User may originate programming that is routed over the residential cable network and provided to residential subscribers of cable service. In addition, the Eligible User may originate programming that is received at another Eligible User location within the community.

The originating program content is captured and broadcasted live using a standard NTSC video camera and or is a pre-recorded program that is broadcast over Cox's FSN using a standard NTSC video tape or DVD playing device. The Audio/Video ("AV") baseband signal is inserted into a signal modulation or encoding device (i.e., modulator, modem, encoder) and is transported on an upstream frequency modulated ("FM") carrier over Cox's FSN between the 5-108 MHz frequency spectrum. This initial analog or digital signal is received and processed (either modulated, decoded, or multiplexed etc.,) at the local regional Hub Site and distributed on a "FM" downstream carrier on a frequency above 168MHz and received by a Digital Consumer Terminal ("DCT" or Set-Top Box) that is connected to an Eligible User(s) NTSC television or monitor.

The versatility of this design allows for the originating programming content to be distributed over a statewide interconnect channel and also out onto an existing public, educational or governmental access channel, if scheduled.

## SIMPLIFIED DIAGRAMS – VIRTUAL B NETWORK VIDEO SERVICES





# EXHIBIT 4 INSTALLATION REQUEST FORM

# **COX COMMUNICATIONS**

|     | FITUTIONAL/INDUSTRIAL NETWORK INSTALLATION REQUEST<br>DUEST No.   |
|-----|---|
| DAT | QUEST No TE/TIME OF SUBMISSION  |
| 1.  | Authorized Representative   |
| 2.  | Eligible User   |
| 3.  | Eligible User is a (check one)school municipality   |
|     | non-profit institutionstate   |
| 4.  | Location(s) to be served: Street address  |
|     | Town/ZipOwner of Building to be Served  |
| 5.  | Eligible User Contact Information: Name   |
|     | Address   |
|     | Telephone Number  |
|     | Fax Number  |
|     | E-mail Address  |
| 6.  | Service(s) Requested:   |
|     | A. Services Offered at No Charge  |
|     | Origination of Video Programming to be received byresidential subscribersa single designated locationmultiple designated locations  |
|     | Data Services(choose one)*:Option I Virtual Area Network ("VAN") connectivity @128 Kbps symmetricalOption II cable modem-based Internet access service @ 128 Kbps symmetrical |

# B. Services Offered at a Charge

| Two way video transmission service (e.g., teleconferencing)   |
|---|
| • Higher speed Data Services and related Internet Services are available from Cox for a fee as follows:   |
| Option I VAN connectivity at speeds of256 Kbps or384Kbps Symmetrical  |
| Option II Internet Services at speeds of256 Kbps or384 Kbps Symmetrical   |
| CoxMail BasicCoxMail PremiumWeb Hosting   |
| Additional IP Address   |
| • Equipment Purchases: Cox will sell certain Equipment to an Eligible User. It will also provide the names of at least 2 vendors that sell Equipment that is compatible with the Institutional/Industrial Network.  Equipment to be Purchased |
| Design and Installation Services: Cox will provide design and installation services on a time and materials basis.  |
| Design and Installation Services Requested?   |
| • <b>Training</b> : In addition to the training that Cox offers as part of its Institutional/Industrial Network Program, Cox also makes available on time and materials basis training customized for an Eligible User's needs.               |
| Customized Training Requested?  |

|                        | Digital Telephone Services are available to Eligible Users from Cox. through its affiliate, Cox Rhode Island Telcom, LLC. Interested?   |
|------------------------|---|
|                        | Yes. You may also call (401) 383-6100 for product and service information.  |
|                        | No.   |
| Exis                   | ting Connections to Cox's Network   |
|                        | None. If none, estimated distance between Cox's network and the building connected to Cox's network: within 150 feet more than 150 feet |
|                        | Existing Aerial Service Drop  |
|                        | Existing Underground Service  |
| Desi                   | red Point of Interconnection with Cox's Network:  |
| Desir                  |   |
|                        |   |
| Estin Type             | red Point of Interconnection with Cox's Network:  |
| Estin<br>Type<br>origi | nated Usage of Institutional/Industrial Video Services of programming to be nated  uency of origination per day per                     |

|               | ginated programming per                                 |
|---------------|---|
|               |   |
| Гуре of progr | amming to be received from an originating Eligible User |
|               |   |
|               | ible User originating the programming to be             |
|               |   |
|               | receipt per day per                                     |
|               |   |
| Time of day o | of  |
|               |   |
| _             | gramming received per                                   |
|               |   |
| Estimated Us  | se of Option I Virtual Area Network Connection          |
|               |   |
| What location | s will be connected?                                    |

10.

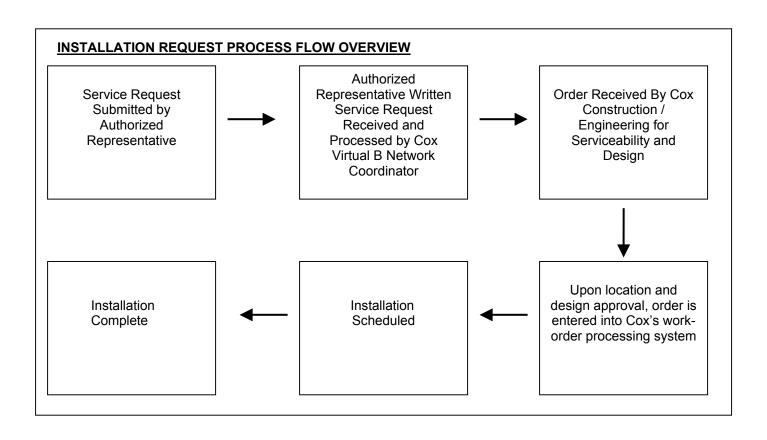
#### INSTALLATION REQUEST PROCESS FLOW OVERVIEW

<u>Installation Request Process Description</u> – Initially the Authorized Representatives will submit an Installation Request Form ("IRF") as referenced hereto and restated and incorporated herein as "EXHIBIT 4" and sent via electronic email or facsimile means to Cox's Virtual B Network Coordinator. Sometime in the future Cox will develop and activate a secure password protected on-line web-based order processing method for the Authorized Representatives. This form submittal will establish a timestamp to include the date of the request to allow for the tracking of the order and processing time for Cox and the Authorized Representatives.

Cox's Virtual B Network Coordinator will receive the "IRF" and initiate an internal Cox Serviceability Form which will determine if an Eligible User location is serviceable through the Standard Installation Process. If it is determined that an Eligible User location does not qualify for a Standard Installation, then Cox will dispatch a Field Engineer ("FE") to the Eligible User location to conduct a site survey and work with the Eligible User on its installation needs. The survey is designed to develop a quote and Bill of Materials ("BOM") for the Eligible User location that will be returned to the Authorized Representative for his / her installation approval.

Upon the Authorized Representative's approval, the order is entered and scheduled into Cox's order entry system and the installation process begins just as all other commercial and residential customers orders that are processed daily by Cox.

The Technician arrives on-site as scheduled and reviews with the Eligible User (or Authorized Representative) the installation plan. Upon the overall agreement, the installation is started and completed with the Eligible Users (or Authorized Representative's) signed installation acceptance.



# ELIGIBLE USER AGREEMENT

[THIS AGREEMENT IS ILLUSTRATIVE OF THE FORM THAT COX INTENDS TO USE]

**INET Services Agreement** 

| Customer/Eligible User Account Number: | System Address |
|--|----------------|
| Federal Tax ID Number:                 |                |
| Contract Number:                       |                |

| Eligible User Information                         | Authorized Representative Information |
|---|---------------------------------------|
| Eligible User:                                    | Name:                                 |
| Service Street Address:                           | Phone Number:                         |
| City/State/Zip:                                   | Fax Number:                           |
| Requested Service Date:                           | Additional Contact Number (optional): |
| Billing Street Address (if different from service | E-mail Address (optional):            |
| address)  |                                       |
| Street Address:                                   |                                       |
| City/State/Zip:                                   |                                       |

Cox shall provide the following Services and Equipment and Eligible User agrees to pay the fees and charges set forth below. Cox has provided and the Eligible User and/or Authorized Representative acknowledges that it has received from Cox prior to its execution of this Agreement a list of unaffiliated vendors of Equipment and non—Standard Installations. Where indicated below, Cox shall provide a Service at no charge to the Eligible User as part of its commitment to make available certain video and data services available at no charge:

(Initials)

|  |                     |          | Total Service Charges     |                                  |  |
|--|---------------------|----------|---------------------------|----------------------------------|--|
|  | Service Description | Quantity | Term<br>(UP TO<br>1 YEAR] | Monthly Recurring /Access Charge | Non Recurring/One-<br>time Activation<br>and Set-up Fees |
|  |                     |          |                           |                                  |  |
|  |                     |          |                           |                                  |  |

| Equipment Description | Quantity | U<br>ni<br>t<br>P<br>ri<br>c | Installation Fees | Total Equipment |
|-----------------------|----------|------------------------------|-------------------|-----------------|
|                       |          |                              |                   |                 |
|                       |          |                              |                   |                 |

| [x] Dedicated Data Services-Point to Point(s) |  |
|---|--|
|   |  |

| Address of Origination Point A                        | Address of Termination Point B            |
|---|---|
|   |   |
| Address of Origination Point A                        | Addresses of Termination Points           |
|   |   |
|   |   |
|   |   |
| ☐ Internet Services                                   | (Initials)                                |
| POP Mail Boxes  | Domain Name Registration                  |
| 1.  | 1.  |
| 2.  | 2.  |
|   |   |
|   |   |
| □ Video   | (Initials)                                |
| Set Top Box:  | Converter:                                |
| 1. point to point(s)                                  | Remote:                                   |
| 2. transport to residential network                   |   |
|   |   |
|   |   |
|   |   |
| ☐ Special Conditions                                  |   |
| 1. Credit Option- If any credit is being claimed, the |   |
| this space the source and amount of any claimed       | credit and identify the fee-based Service |
| against which the credit should be applied            |   |
|   |   |
|   |   |
|   |   |
|   |   |
| 2. Other-   |   |
|   |   |
|   |   |

The undersigned represents that he/she is the Eligible User or the Authorized Representative identified above and is authorized to sign this Agreement on behalf of the Eligible User for the services in this Agreement and that the Eligible User information is true and correct. This Agreement binds the Eligible User to the Rates, Terms and Conditions of Service applicable to each of the services selected above, including any termination penalties that may apply. Eligible User understands that telephone services are provided by Cox Rhode Island Telcom, LLC, are outside the scope of this Agreement, and that such services are generally subject to rates, terms and conditions contained in tariffs on file with, as well as the regulations of, the Rhode Island Public Utilities Commission and/or the Federal Communications Commission, and that such regulations may change from time to time.

All Services are subject to the Terms and Conditions on Pages 2, 3 and 4attached hereto Internet, Data, Web Hosting and/or Web Conferencing, CoxMail(sm) E-Mail Services, if selected by the Eligible User, are subject to Acceptable Use Policies and Eligible User acknowledges receipt of these

by signing below. The undersigned authorizes Cox to check credit and this Agreement is subject to credit approval. Prices listed do not include applicable taxes, fees, assessments or surcharges.

See www.cox.com/telephone/customerservicesagreement.asp.

| Eligible User: Title:                                | Date: |  |
|--|-------|--|
| CoxCom, Inc.; Cox Rhode Island Telcom, LLC By: Title | Date: |  |
|  |       |  |
|  |       |  |

# A. <u>Terms and Conditions of Data, Internet, Web Hosting, Web Conferencing, Video and Unregulated Services.</u>

- 1. Payment Eligible User shall pay for all applicable Agreed to Rates, fees and charges for Non-Standard Installations, Time and Materials Services, Equipment purchased from Cox, Associated Internet Services, Miscellaneous Items and fees and charges for the provision of two-way Virtual B Network Video Services. Unless stated otherwise herein, recurring monthly charges for Services shall begin upon installation of Services. Nor-recurring charges shall be due upon completion of installation. Any amount not received by the due date shown on the applicable bill will be subject to interest or a late charge at the maximum rate allowed by law. If applicable to the Service, Eligible User shall, if not exempt from the same, pay any applicable sales, use, gross receipts, excise, access, universal service fund assessments, 911 fees, franchise fees, bypass or other local, state and Federal taxes or charges imposed on the use of the Services. Taxes will be separately stated on the Eligible User's invoice.
- 2. Service and Installation Cox shall provide Eligible User with the Services and Equipment identified on the first page of this Agreement. Eligible User is responsible for damage to any Cox equipment. Eligible User may use the Services for any lawful purpose, provided that such purpose (a) does not interfere with or impair the safety, reliability or service quality of the Cox network, equipment or facilities and/or (b) complies with the applicable Acceptable Use Policy ("AUP") which has been provided by Cox to the Eligible User and which are incorporated herein by reference. Eligible User shall use the equipment provided by Cox only for the purpose of receiving the Services. Eligible User shall not make any connections to the equipment which are not expressly authorized in writing by Cox. Eligible User shall not permit tampering, altering or repair of the equipment by any person other than Cox's authorized personnel. Unless provided otherwise herein, Cox shall use reasonable efforts to maintain the Services in accordance with applicable performance standards, however, Cox shall have no responsibility for the maintenance or repair of facilities and equipment it does not furnish. For Cox Internet Services, bandwidth speed options may vary consistent with network conditions. Eligible User may not always receive or obtain optimal bandwidth speeds and Cox network management needs may require Cox to modify upstream and downstream speeds. Use of the data, Internet, web conferencing/web hosting Services shall be subject to the Cox AUP The AUPs may be amended from time to time during the Term of this Agreement in accordance with the Settlement Agreement approved by the Division in Docket No. 2000-C-7. Eligible User's continued use of the Services following an amendment shall constitute acceptance. Cox is not responsible for the networks or facilities of third parties which may be necessary to provide Service.
- 3. <u>Service Date and Term</u> This Agreement shall be effective upon execution by the parties. Services shall be provided for the applicable term set forth on the first page of this Agreement. The initial term of this Agreement shall not exceed one (1) year. After the initial term, this Agreement shall be automatically renewed on a month to month basis. Cox shall use reasonable efforts to make the Services available by the requested service date. Cox shall not be liable for any damages whatsoever resulting from delays in meeting any service dates due to delays resulting from construction or for reasons beyond its control.

- 4. Eligible User Responsibilities Eligible Users and Authorized Representatives are required to engage in appropriate planning and coordination of their Virtual B Network prior to forwarding an installation request to Cox. Such planning and coordination will include, but will not be limited to: (i) determining Eligible User locations; (ii) determining community or other Virtual B Network applications; (iii) selecting compatible aspects of the Virtual B Network; (iv) selecting, purchasing and installing compatible Equipment; and (v) coordinating installation requests and the order thereof. Eligible User is responsible for arranging all necessary rights of access for Cox within the Eligible User's premises, including space for cables, conduits, and equipment as necessary for Cox-authorized personnel to install, repair, inspect, maintain, replace or remove any and all facilities and equipment provided by Cox. Upon reasonable notice, an Eligible User will be required to provide Cox with access to its site in order to permit Cox to conduct network monitoring and to ensure that quality of service objectives are satisfied. Eligible Users shall also be required to grant Cox reasonable access to their premises in order to enable Cox to provide Standard and Non-Standard Installations. Eligible User shall provide a secured space with electrical power, climate control and protection against fire, vandalism, and other casualty for Cox's equipment. Eligible User shall use the Services in compliance with all applicable laws and ordinances, as well as applicable leases and other contractual agreements between Eligible User and third parties. If Eligible User engages in a public performance of any copyrighted material contained in any of the Services provided under this Agreement, the Eligible User, and not Cox, shall be responsible for obtaining any public performing licenses. Eligible User is responsible for ensuring that Eligible User's equipment is compatible for the Services selected and with the Cox network.
- 5. Eligible Users and Authorized Representatives shall be responsible for Equipment purchasing all Equipment and Time and Materials Services except for (1) cable modems included with Option I VAN Service and (2) Equipment and Time and Materials Services provided to Eligible Users pursuant to Part III, Section 12(d) of the Settlement Agreement approved by the Division in Docket No. 2000-C-7. Eligible Users and Authorized Representatives must ensure that their Equipment is compatible with Cox's network. Cable modems used by Eligible Users in connection with the Virtual Data Network must be DOCSIS compliant. Unless otherwise provided herein, Eligible User agrees that Cox shall retain all rights, title and interest to facilities and equipment owned and installed by Cox thereunder and that Eligible User shall not create or permit to be created any liens or encumbrances on such equipment. Internal Wiring shall not be considered equipment and shall become the property of Eligible User upon initiation of Service. Cox shall install equipment necessary to furnish the video Services to Eligible User. Eligible User shall not modify or relocate equipment installed by Cox or install any other equipment, including servers in connection with data/Internet without the prior written consent of Cox. For Cox-owned equipment, Eligible User shall, at the expiration or termination of this Agreement, return the equipment in good condition, ordinary wear and tear resulting from proper use excepted. In the event the equipment is not returned to Cox in good condition, Eligible User shall be responsible for the value of such equipment. Cox shall repair any equipment owned by Cox at no charge to Eligible User provided that damage is not due to misuse, abuse or other disaster including acts of God. If additional equipment, including but not limited to, monitors, computers, circuits, software or other devices, are required by Eligible User to use the Services, Eligible User shall be responsible for such equipment.

- 6. **Resale of Service** Eligible Users and Authorized Representatives shall not give, resell, lease or otherwise distribute video, data or transport capacity of the Virtual B Network or any video or Option I or Option II data service provided by Cox.
- 7. <u>Default</u> If Eligible User fails to comply with any material provision of this Agreement, including, but not limited to failure to make payment as specified, then Cox, at its sole option, may elect to pursue one or more of the following courses of action upon proper notice to Eligible User as required by tariff or applicable law: (i) terminate service whereupon all sums then due and payable shall become immediately due and payable, (ii) suspend all or any part of Services, and/or (iii) pursue any other remedies, including reasonable attorneys' fees, as may be provided at law or in equity, including the applicable termination liabilities.
- 8. <u>IP Address and Domain Name Registration</u> Cox will allocate IP addresses to Eligible User according to InterNIC guidelines. All IP addresses assigned by Cox must be relinquished by Eligible User upon the expiration, termination or cancellation of this Agreement. IP address shall be subject to the IP address AUP. If Eligible User requests, Cox will register an available domain name on behalf of Eligible User, and such registration shall be subject to rules promulgated by the domain name registrar, which may be amended from time to time. The rules are presently posted at <a href="http://rs.internic.net/help/net/policy.html">http://rs.internic.net/help/net/policy.html</a>. Eligible User is responsible for payment and maintenance of domain name registration.
- 9. **Termination** Customer may terminate a fee-based video Service for any reason, upon payment for all sums for video Services rendered. Customer may terminate data, Internet, web hosting and/or web conferencing Services before the end of the term selected by Customer on the first page of this Agreement; provided, however, if Customer terminates Service before the term selected by Customer (except for breach by Cox), or Cox terminates Services for Customer's breach of this Agreement or the AUPs, Customer may be subject to a termination liability. The termination liability shall equal 100% of the monthly recurring charges for the terminated Services multiplied by the number of full months remaining in the initial term commitment. After the initial term, this Agreement shall automatically renew on a month-to-month basis and shall be subject to terms of this Agreement. Any termination by Customer must be in writing. Cox may immediately discontinue providing Virtual B Network Video Services, the Virtual Data Network (Options I and II) or Associated Internet Services to an Eligible User if the Eligible User: (a) installs Equipment that is incompatible with the FSN, (b) engages in conduct that impacts the safety or reliability of the FSN, (c) gives, resells, leases or otherwise distributes data or transport capacity of the Virtual B Network or otherwise engages or permits others to engage in the unauthorized use of the Virtual B Network, or (d) engages in conduct contrary to Cox's Acceptable Use Policies that affect the safety or reliability of the FSN. Within forty-eight (48) hours of the discontinuance of service to an Eligible User, Cox shall notify the Division and the appropriate Authorized Representative in writing of the discontinuance of such service.

- 10. <u>LIMITATION OF LIABILITY</u> COX SHALL NOT BE LIABLE FOR DAMAGES FOR FAILURE TO FURNISH OR INTERRUPTION OF ANY SERVICES, NOR SHALL COX BE RESPONSIBLE FOR FAILURE OR ERRORS IN SIGNAL TRANSMISSION, LOST DATA, FILES OR SOFTWARE DAMAGE REGARDLESS OF THE CAUSE. COX SHALL NOT BE LIABLE FOR DAMAGE TO PROPERTY OR FOR INJURY TO ANY PERSON ARISING FROM THE INSTALLATION, MAINTENANCE OR REMOVAL OF EQUIPMENT OR THE PROVISION OF SERVICES. UNDER NO CIRCUMSTANCES WILL COX OR AN ELIGIBLE USER BE LIABLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING LOST PROFITS ARISING FROM THIS AGREEMENT. COX'S MAXIMUM LIABILITY TO ELIGIBLE USER ARISING UNDER THIS AGREEMENT SHALL BE THE LESSER OF \$5,000.00 OR THE AMOUNT ACTUALLY PAID BY CUSTOMER FOR SERVICES HEREUNDER.
- 11. **Assignment** Eligible User may not assign, in whole or in part, this Agreement without the prior written consent of Cox, which consent may be withheld in Cox's discretion. Cox may assign this Agreement and Service may be provided by one or more legally authorized Cox affiliates.
- 12. WARRANTIES EXCEPT AS PROVIDED HEREIN, THERE ARE NO AGREEMENTS, WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, RELATING TO THE SERVICES. SERVICES PROVIDED ARE A BEST EFFORTS SERVICE AND COX DOES NOT WARRANT THAT THE SERVICES, EQUIPMENT OR SOFTWARE SHALL BE ERROR-FREE OR WITHOUT INTERRUPTION. COX MAKES NO WARRANTY AS TO TRANSMISSION OR UPSTREAM OR DOWNSTREAM SPEEDS OF THE NETWORK.
- 13. **INDEMNITY** Eligible User shall indemnify and hold Cox and its respective affiliates, subcontractors, employees or agents harmless (including payment of reasonable attorneys fees) from and against any claim, actions or demands relating to or arising out of Eligible User's use of the Service including without limitation (i) any content or software displayed, distributed or otherwise disseminated by the Eligible User, its employees, or users of the Services; (ii) any claim that Eligible User's use of the Service including the registration and maintenance of Eligible User's selected domain name(s), infringes on the patent, copyright, trademark or other intellectual property right of any third party; (iii) any malicious act or act in violation of any laws committed by Eligible User, its employees or users using the Services; and (iv) violation by Eligible User, its employees or authorized users of the Cox AUPs.
- 14. <u>Viruses, Content, Eligible User Information</u> Software or content obtained from the use of Service may contain viruses or other harmful features and Eligible User is solely responsible for protecting its equipment and software from such matters. Through the use of the Service, Eligible User may obtain or discover content that is offensive or illegal and Eligible User assumes the risk and is solely responsible for its access to such content. Cox may disclose Eligible User information to law enforcement or to any Cox affiliate. Cox may disclose Eligible User information to third parties provided Eligible User identifiable data is not disclosed.

- 15. Miscellaneous This Agreement, the documents referenced herein, and the AUPs constitute the entire agreement between Cox and Eligible User for the Services and equipment provided herein. The invalidity or unenforceability of any term or condition of this Agreement shall not affect the validity of enforceability of any other provision. This Agreement may be modified, waived or amended only by a written instrument signed by the parties; provided Cox may modify the AUP as provided for under the terms of the Settlement Agreement approved by the Division in Docket No. 2000-C-7and if Eligible User continues to use the Service, Eligible User shall be bound by such AUP as modified. The rights and obligations of the parties under this Agreement shall be governed by the laws of the State or Commonwealth where the Services are provided. The failure by either party to exercise one or more rights provided in this Agreement shall not be deemed a waiver of the right to exercise such right in the future. Notices required by this Agreement shall be in writing and shall be delivered either by personal delivery or by mail. If delivered by mail, notices shall be sent by any express mail service; or by certified or registered mail, return receipt requested; with all postage and charges prepaid. All notices and other written communications under this Agreement shall be addressed to the parties at the addresses on the first page of this Agreement, or as specified by subsequent written notice delivered by the party whose address has changed.
- 16. **Regulatory Authority-Force Majeure** This Agreement and the obligations of the parties shall be subject to modification to comply with all applicable laws, regulations, court rulings, and administrative orders, as amended. This Agreement is subject to the terms and conditions of the Order of and Settlement Agreement approved by the Rhode Island Division of Public Utilities and Carriers ("Division") in Docket No. 2000-C-7. In the event of any inconsistency between the terms and conditions of this Agreement and the Division's Order in Docket No. 2000-C-7 or the Settlement Agreement approved by the Division in that Order, the terms and conditions of that Order and Settlement Agreement shall be controlling. In no event shall either party have any claim against the other for failure of performance if such failure is caused by lock out or other labor disputes, acts of God, acts of public enemies, acts of terrorists, shortage of materials, orders of any kind of the government of the United States of America or the State of Rhode Island or any of their departments, agencies, political subdivisions (excluding the Division or Commission) or officials, taking of property by condemnation, any civil or military insurrections, riots, epidemics, winds, landslides, lightning, earthquakes, fires, hurricanes, storms, floods, washouts, droughts, arrests, civil disturbances, explosions, partial or entire failure of utilities, or any other case or event not reasonably within the control of the party claiming force majeure.
- 17. <u>Software License</u> Cox grants Eligible User a limited, nonexclusive, nontransferable and nonassignable license to install and use as provided herein (i) Cox access software, as well as software from our licensors that Cox incorporates into its access software), (ii) all associated user documentation and (iii) any updates thereto (the "Software"). Eligible User's use of the Software is governed by these terms and conditions. All rights title and interest to the Licensed Software, including associated intellectual property rights, are and will remain with Cox and Cox's licensors. Eligible User may not decompile, reverse engineer, distribute, translate any part of Software. Eligible User acknowledges that the Software, and any accompanying documentation and/or technical information, is subject to applicable export control laws and regulations of the

USA. Eligible User agrees not to export or re-export the Software, directly or indirectly, to any countries that are subject to USA export restrictions.

- 18. Web Hosting Servers Cox reserves the right to select the server for Customer's web site for best performance. The Eligible User understands that the Services provided by Cox may be provided on a shared server. This means that one web site cannot be permitted to overwhelm the server with heavy CPU usage, for example from the use of highly active CGI scripts or chat scripts. If the Eligible User's web site overwhelms the server and causes complaints from other users, the Eligible User has outgrown the realm of shared services and will be required by Cox to relocate its web site. If the Eligible User refuses to comply with this Section, then Cox has the right to terminate the Services. Cox will use reasonable efforts to maintain a full time Internet presence for the Eligible User. The Eligible User hereby acknowledges that the network may, at various time intervals, be down due, but not restricted to, utility interruption, maintenance equipment failure, natural disaster, acts of God, or human error and Cox shall not be liable to Eligible User for such outages or server downtime.
- 20. <u>Digital Millennium Copyright Act</u> Cox is registered under the Digital Millennium Copyright Act of 1998. Pursuant to 17 U.S.C. Section 512(c)3, if you believe that a Web page hosted by Cox is violating your rights under U.S. copyright law, you may file a complaint with Cox's designated agent. Please contact DMCA@Cox.com for information necessary to file your complaint with Cox.
- 21. **E-Rate Customers** This paragraph applies only to educational institutions or libraries seeking reimbursement under the Federal Universal Service Fund. If Eligible User seeks reimbursement from the Federal Universal Service Fund, then Eligible User shall annually apply to the Schools and Libraries Division, "SLD" and designate the proper Cox service provider affiliate as its provider of services ordered and/or purchased herein. The parties acknowledge and agree that the SLD may, at its sole discretion, grant different amounts of annual funding to Eligible User, and, as such, Eligible User may terminate the purchase of certain Service elements purchased herein if USF funding is no longer available for such Service. Notwithstanding the foregoing, if USF funding is decreased by the SLD, then the Eligible User shall agree to purchase additional Services from Cox or extend the term of the Agreement by one year. If Eligible User fails to pursue either option then Cox may terminate the Agreement at the end of the calendar current school year, without penalty.
- 22. <u>Disputes</u> Disputes arising as a result of or in connection with the making available, operation or maintenance of the Virtual B Network or the terms and conditions shall be governed by the procedures set forth in the Settlement Agreement approved by the Division in Docket No. 2000-C-7.

# SERVICE REQUEST PROCESS FLOW OVERVIEW

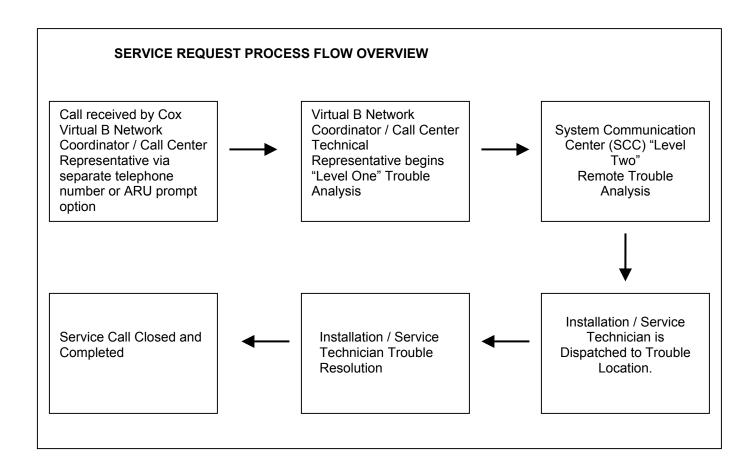
#### SERVICE REQUEST PROCESS FLOW OVERVIEW

<u>Service Request Process Description</u> – A Service Request is placed via telephone to Cox from the Authorized Representative or Eligible User. The Virtual B Network Coordinator or Call Center Representative receives the Service request call from the Authorized Representative or Eligible User and enters the Service Request ("SR") into Cox's work order entry system. While the Cox Representative and the Authorized Representative or Eligible User are on the call "Level One" troubleshooting begins over the telephone with the Authorized Representative or Eligible User(s).

If "Level One" troubleshooting is unsuccessful then the order is internally escalated via Cox's order entry system and passed onto Cox's System Communication Center ("SCC") where "Level Two" Remote troubleshooting Begins.

If "Level Two" troubleshooting is unsuccessful then an Installation / Service Technician is scheduled and dispatched to the Eligible User location.

Upon the Technicians successful trouble resolution the service request order is closed and logged.



#### **EXHIBIT 8-DATA SERVICES CREDIT OPTION ILLUSTRATION**

Part III, Section 7 of the Settlement Agreement provides a credit option for data services whereby an Eligible User (of data services) may elect to decline a data service made available by Cox at no cost (e.g., 128 Kbps symmetrical Internet Service) and take a credit which can be applied against the cost of a data service provided by Cox on a fee basis. The value of the credit is set at 80% of the retail, non-discounted rate that Cox Business Services charges for the same service as offered to customers that are not Eligible Users. No service will be provided at less than 50% of the retail, non-discounted rate that Cox Business Services would charge a customer that is not an Eligible User. An Eligible User may transfer a credit to another Eligible User within the same municipality.

Example 1: A school does not wish to receive 128 Kbps symmetrical Internet Service, but wants 384 Kbps symmetrical Internet Service. 384 Kbps symmetrical Internet Service, available at a discounted rate of \$151.20 under the Settlement Agreement, would be provided at a further reduced rate of \$102.20, reflecting the application of a \$49.00 credit (which is 80% of the retail, non-discounted rate that Cox Business Services charges for the same service to customers that are not Eligible Users). Since \$102.20 is at least 50% of the retail, non-discounted rate that Cox Business Services would charge for 384 Kbps symmetrical Internet Service, the full value of the credit can be utilized to obtain a higher speed Internet Service.

Example 2: A school does not wish to receive the free Internet Service, but wants to upgrade to the 256 Kbps level. The retail non-discounted charge for this service is \$111.25. The charge for this service, after application of a credit, cannot be less than \$55.63, or 50% of the retail charge. Thus, the \$49.00 credit cannot be used to reduce the discounted rate of \$89.00 for 256 Kbps service to \$40.00. However, the unused portion of the credit, \$15.63, can be carried over and used by the school or transferred to another Eligible User within the same municipality.

Example 3: The Authorized Representatives for a municipality's schools and other municipal building locations determine that it is in the best interests of the municipality to have a school location or locations transfer credits to other municipal building locations so that these other municipal building locations can obtain VAN services at a deeper discount. These credits may be transferred by the Authorized Representative for the public schools to the Authorized Representative for other municipal building locations, who may in turn apply those credits toward a higher speed VAN service. For example, a school location could transfer a VAN credit of \$47.50 month (80% of the retail rate of \$59.00/month) to be applied to another municipal building VAN location that is signed up for 384 Kbps VAN service normally provided at a discounted monthly rate of \$111.00 per point. Because application of the full amount of the credit would reduce the monthly rate below 50% of the retail rate (\$138.75/month per point) to \$63.50, the applicable monthly rate after the credit would be \$69.50 (50% of the retail rate) and a carryover credit balance of \$6.00/month would be

available for application to another municipal building location point that receives VAN service.

The minimum rates to be charged for the VAN Services and Internet Services which are offered by Cox on a discounted basis, after the application of credits, are as follows:

#### **VAN SERVICES**

| <b>Service</b> | Retail Rate | <b>Discounted Rate</b> | <b>Lowest Rate after Credits*</b> |
|----------------|-------------|------------------------|-----------------------------------|
| 256 Kbps       | \$89.00/mo  | \$71.00/mo             | \$44.50/mo                        |
| 384 Kbps       | \$138.75/mo | \$111.00/mo            | \$69.50/mo                        |

#### INTERNET SERVICES

| <b>Service</b>        | Retail Rate | <b>Discounted Rate</b> | <b>Lowest Rate after Credits*</b> |
|-----------------------|-------------|------------------------|-----------------------------------|
| 256 Kbps              | \$111.25/mo | \$89.00/mo             | \$55.63/mo                        |
| 384 Kbps              | \$189.00/mo | \$151.20/mo            | \$94.50/mo                        |
| 256 Kbps/<br>1.5 Mbps | \$248.75/mo | \$199.00/mo            | \$124.38/mo                       |

<sup>\*</sup> The lowest rate after credits equals 50% of the retail, non-discounted rate. The value of the credit for the free 128 Kbps symmetrical VAN service is \$47.20/month (80% of \$59.00/month retail rate). The value of the credit for the free 128 Kbps internet service is \$49.00/month (80% of \$61.25/month retail rate).

NOTE:If retail, non-discounted rates for the VAN and Internet Services are reduced during a 3 year period following the date of the Division's Order approving Cox's I-Net proposal, the discounted rates shown above will be adjusted so that they remain 20% below the current retail, non-discounted rates. By the same token, the value of the credit will be reduced.

# **EXHIBIT 9**

# ACCEPTABLE USE POLICY

# [THIS ACCEPTABLE USE POLICY IS ILLUSTRATIVE OF WHAT COX INTENDS TO USE]

#### VIRTUAL DATA NETWORK ACCEPTABLE USE POLICY

#### A. General Terms

The following terms and conditions of this Virtual Data Network Acceptable Use Policy (the "Policy") apply to all Internet-related Virtual B Network Services (herein defined as "Services") obtained by Eligible Users from Cox via the Virtual Data Network. ANY EELIGIBLE USER WHO DOES NOT AGREE TO BE BOUND BY THESE TERMS SHOULD IMMEDIATELY STOP USE OF THE SERVICES AND NOTIFY COX ACCOUNT MANAGEMENT SO THAT THE ELIGIBLE USER'S SERVICE CAN BE CANCELLED. Questions regarding this Policy and complaints of violations of this policy can be directed to the Virtual B Network Coordinator, who may forward them to abuse@coxmail.com.

- 1. Illegal Activity. Use of Virtual Data Network for any activity that violates, or constitutes an attempt to violate, any local, state, federal or international law, order or regulation, or to engage in tortious conduct, is a violation of this Policy.
- 2. Spamming/Unsolicited Bulk E-Mail. Sending unsolicited mail messages to users other than users of the Virtual Data Network, including, without limitation, commercial advertising and informational e-mail is spamming and is prohibited. Eligible Users may not post to any Usenet or other newsgroup, forum, or list articles which are illegal, obscene or indecent. Eligible Users may not forward chain letters, or falsify user information, including forging, altering or removing electronic mail headers. Eligible Users may not reference Cox or any related entity (e.g., by including "Organization: Cox" in the header or by listing an IP address that belongs to Cox or any related entity) in any unsolicited e-mail even if that e-mail is not sent through the Cox network.
- **3. Bandwidth Limitations.** Eligible Users must comply with the current bandwidth, data storage and other limitations on Services. Eligible User may not use Services in a manner contrary to these specifications.
- 4. Security. Cox shall not be responsible for any misuse of the Services even if the inappropriate activity was committed by an employee, Customer, consultant, guest or other individuals who have access to the Eligible User's system or network. The Eligible User must take steps to ensure that others do not gain unauthorized access to Services. This includes any third party use of unsecured mail and news servers or any other unauthorized access that results in a violation of any portion of this Policy. The Services may not be used to breach the security of another Internet user or to attempt to gain access to any other person's or entity's computer, server, software or data, without the knowledge and consent of such person or entity, including attempts to circumvent the user authentication, or probing the security of other networks. An Eligible User may utilize scanners, sniffers and any other such security analysis tools to maintain the Eligible User's own network as long as Eligible User only uses such tools with

respect to its own network. Cox does not under any circumstance allow Eligible Users or unauthorized individuals to scan, probe, or use security analysis tools against the Cox network or the networks of our other customers and use of or distribution of tools designed for compromising security of non-Eligible User networks, such as password guessing programs, cracking tools, packet sniffers or network probing tools, is prohibited. Eligible Users may not Services or interfere with computer networking or willfully or knowingly disrupt telecommunications services to any user, host or network, including, without limitation, denial of service attacks, flooding of a network, overloading a service, improper seizing and abuse of operator privileges and attempts to "crash" a host. The transmission or dissemination of any information or software which contains a virus or other harmful feature also is prohibited. Cox shall not be responsible for the security of any device any Eligible User chooses to connect to the Services, including any data stored on that device. If Cox detects that Customer's equipment or Eligible User's Internet/data transmissions contain Viruses, Trojans, Worms or similar damaging content/data that adversely affects the Cox network, the Services provided to other Cox customers, or otherwise compromises the integrity or the operation of the Cox network, Cox may disconnect the Eligible User from Service immediately; and, in this event, Cox will make reasonable efforts to promptly contact Eligible Users regarding the interruption of Service.

- **5.** Eligible User Information. Cox and its distribution affiliates and vendors may cooperate with (i) law enforcement authorities in the investigation of suspected criminal violations, and (ii) system administrators at other Internet service providers or other cooperation may include Cox or its vendors providing the name, IP address(es), or other identifying information about an Eligible User. Upon termination of an Eligible User's Service, Cox is authorized to delete any files, programs, data and e-mail messages associated with such account, inappropriate content and unacceptable links Cox bears no responsibility for any information accessed by Eligible Users through use of the Services. Cox and its distribution affiliates and vendors reserve the right to refuse to post or to remove any information or materials, in whole or in part, that it, in its sole discretion, deems to be offensive, indecent, or otherwise inappropriate regardless of whether such material or its dissemination is unlawful or infringes on the copyright, trademark, or other intellectual property right of a third party. By using the Services to reproduce, publish, display, transmit and distribute content, the Eligible User must ensure that the content complies with this Policy and is authorizing Cox and its distribution affiliates to reproduce, publish, display, transmit and distribute such content as necessary for Cox to deliver the content in a timely manner. Examples of unacceptable content or links: "Pirated software", "Hackers programs or archives", "Warez Sites", "Irc Bots", "Mp3".
- **6. Newsgroups.** Messages posted to newsgroups must comply with the written charters or FAQs for those newsgroups. The Eligible User is responsible for determining the policies of a given newsgroup before posting to it. Posting or cross-posting the same or substantially similar messages to more than eight (8) newsgroups is prohibited.
- 7. Internet Relay Chat. The Services may be used to participate in "chat" discussions. The Services may not be used to perform chat "flooding." Any single computer or other device connected through the Services may not maintain more than two (2) simultaneous chat

connections. This includes the use of automated programs, such as "bots" or "clones". Automated programs may not be used when the user is not physically present at the device. The Services may not be used to access any chat server in violation of the acceptable use policy of that server.

8. Consequence of Violation of Acceptable Use Policy. When Cox becomes aware of an alleged violation of its Policy, Cox may initiate an investigation. For violations of this Policy, Cox may restrict, suspend, or terminate Eligible User's account pursuant to the terms and conditions of the Order and Settlement Agreement entered in D-2000-C-7 ("Order" and "Settlement Agreement") and/or pursue other civil remedies. Although Cox has no obligation to monitor the Services provided and/or the network, Cox and it various affiliates, vendors and partners reserve the right to monitor bandwidth, usage, and content from time to time to operate our Services; to identify violations of this Policy; and/or to protect the network and Cox customers. Although Cox prefers to advise customers of inappropriate behavior and any necessary corrective action. Cox or its distribution affiliates may take any responsive actions they deem appropriate. The failure of Cox or its distribution affiliates to enforce this Policy, for whatever reason, shall not be construed as a waiver of any right to do so at any time.

#### B. Cox Internet Acceptable Use Policy

These Services will allow the Eligible User to have multiple number of users on the network provided, however, that data throughput performance will be impacted by the number of users and shall be subject to the rate or speed selected by the Eligible User and Eligible User's Domain Name Service (incl. vanity domain name). In addition, the Eligible User has the ability to add servers. The transmission speed of this Service may vary with the number of users and network management needs may require Cox to modify upstream and/or downstream speeds. The Eligible User may not remove Cox owned and managed equipment.

## C. <u>CoxMailSM Acceptable Use Policy</u>

This Policy applies to CoxMailSM Eligible Users and end users. Each Eligible User may have multiple domain accounts and each domain account may have one or more end user.

1. Forwarding/Filtering of Incoming E-Mail. Cox is not responsible for the forwarding of e-mail sent by Eligible User or end user where the account has been suspended or terminated. Such e-mail will either be returned to sender, ignored, deleted, or stored temporarily at Cox's sole discretion. As owner of the equipment and other resources utilized to provide services, Cox has the legal right to block electronic communications from other entities on the Internet. Whenever possible, the party being blocked shall be made aware of such action before it occurs, however, Cox has the right to disable immediately any account in order to forestall further abuse or damage to e-mail systems. Should this occur, the Eligible User shall be notified as soon as possible. Unsolicited advertisements or solicitations sent from other networks which reference e-mail accounts hosted at Cox shall be treated as if they originated from the account referenced, unless there is evidence that the message originated with some unrelated party.

2. Eligible User Information. Cox will not release any personally identifiable information regarding Eligible Users (excepting that which is public knowledge, such as the InterNIC's WHOIS database) or their end users to any third party except upon presentation of (a) a subpoena issued by a government entity in a civil or criminal investigation or litigation; (b) a civil investigative demand issued by a government entity; or (c) a court order. The Eligible User may release such information based upon its sole judgment as to the validity of any such order, and Cox's determination shall be deemed final, conclusive and acceptable to Eligible User, subject to the terms and conditions of the Order and Settlement Agreement.

#### D. Mass Mailing Acceptable Use Policies

This Policy is applicable to mass mailings by Eligible Users. Cox's mass mailing policy is designed to maintain service quality by managing the process in a bandwidth-friendly manner. "Opt-in" Mailings are those sent to more than 150 users by either Cox Eligible Users or their 3rd party partners to any group of end users. Opt-in means that end user has signed up for mailings voluntarily. Before Eligible User or its end users engage in mass mailings. Eligible Users must contact the Virtual B Network Coordinator who will in turn contact massmailing@coxmail.com and comply with all instructions and requirements outlined by Cox before they may engage in mass mailings of greater than 150 users. Failure to comply with this requirement is a violation of this Policy.

## E. Cox IP Address Policy

Cox's IP address policy is based on RFC 2050 and the American Registry for Internet Numbers (ARIN) guidelines for Internet service providers; provided, however, that Cox may allocate IP addresses in any manner in which Cox determines is reasonable for the operation of its internet business. Please contact Cox for any questions regarding IP address rules and policies. All IP addresses assigned by Cox must be relinquished by the Eligible User upon the expiration, termination or cancellation of its Virtual B Network Services Agreement. IP address shall be subject to the IP address Policy. If the Eligible User requests, Cox will register an available domain name on behalf of the Eligible User, and such registration shall be subject to rules promulgated by the domain name registrar, which may be amended from time to time. The rules are presently posted at http://rs.internic.net/help/net/policy.html. The Eligible User is responsible for payment and maintenance of domain name registration.

1. System and Network Security. Cox will not change passwords to any account without proof of identification that is satisfactory to Cox, and that may include written authorization with signature. Eligible User is responsible for all accounts, sub-accounts, and alternative account names associated with the Eligible User's principal account. The Eligible User is responsible for ensuring full compliance by all users of that account with Eligible User's obligations under the Settlement Agreement and this Policy. An Eligible User account may not be transferred without prior written approval from Cox. The Eligible User is responsible for maintaining the confidentiality of his/her password. In the event of a breach of security through the Eligible User's account, the Eligible User will notify Cox's Eligible User care staff immediately.

**2. Misuse of System Resources.** It is a violation of this policy to employ posts or programs which consume excessive CPU time or storage space; to permit the use of mail services, mail forwarding capabilities, POP accounts, or auto responders other than for their Eligible User's account; or to resell access to CGI scripts installed on our servers. Cox shall determine in its discretion whether Eligible User is misusing system resources, subject to the terms and conditions of the Order and Settlement Agreement.

#### F. Web Hosting/Webconferencing Acceptable Use Policy

This Acceptable Use Policy applies to Cox Web Hosting or Webconferencing.

- 1. System and Network Security. Cox will not change passwords to any account without proof of identification, that is satisfactory to Cox, and that may include written authorization with signature. The Eligible User is responsible for all accounts, sub-accounts, and alternative account names associated with the Eligible User's principal account. The Eligible User's obligations under the Settlement Agreement and this Policy. An Eligible User's account may not be transferred without prior written approval from Cox. The Eligible User is responsible for maintaining the confidentiality of his/her password. In the event of a breach of security due to improper actions by the Eligible User, Eligible User will be liable for any unauthorized use of the Cox services, including any damages resulting therefrom.
- 2. Misuse of System Resources. It is a violation of this policy to employ posts or programs which consume excessive CPU time or storage space; to permit the use of mail services, mail forwarding capabilities, POP accounts, or auto responders other than for their Eligible User's account; or to resell access to CGI scripts installed on our servers. Cox shall determine whether the Eligible User is misusing system resources, subject to the terms and conditions of the Order and Settlement Agreement.
- 3. Servers. An Eligible User shall not use another site's mail server to relay mail without the express permission of the site. If the Eligible User sells or resells advertising or web space to a third party then the Eligible User will be responsible for the contents of that advertising and the actions of that third party. Cox has the absolute right to reject any advertising or other third party content that is illegal, offensive or otherwise in breach of this Policy. If the Eligible User refuses to remove any advertising or other third party content deemed objectionable by Cox, Cox may terminate the Services, subject to terms and conditions of the Order and Settlement Agreement.

# **EXHIBIT 10**

# **EXISTING ACTIVE "B-CABLE" LOCATIONS**

| TOWN/<br>FACILITY                     | SERVICE USAGE                                  | <u>USER</u> | <u>Program</u> |
|---------------------------------------|--|-------------|----------------|
| Central Falls:<br>City Hall           | Video<br>Character Generator,<br>Town Meetings | FT          | Municipal      |
| Cranston:<br>Bain High School         | Video<br>School Events                         | PT          | Educational    |
| East Providence:<br>High School       | Video<br>School Events                         | PT          | Educational    |
| <b>Lincoln:</b><br>Town Hall          | Video<br>Town Information,<br>Calendar         | FT          | Municipal      |
| Middletown:<br>Middletown High School | DATA<br>"WAN"                                  | FT          | Educational    |
| J.H. Gaudet Middle School             | DATA<br>"WAN"                                  | FT          | Educational    |
| JFK Elementary School                 | DATA<br>"WAN"                                  | FT          | Educational    |
| Aquidneck Elementary<br>School        | DATA<br>"WAN"                                  | FT          | Educational    |
| Forrest Ave. Elementary School        | DATA<br>"WAN"                                  | FT          | Educational    |

| Town/<br>Facility                    | SERVICE USAGE                          | <u>USER</u> | PROGRAM     |
|--------------------------------------|--|-------------|-------------|
| Oliphant School                      | DATA<br>"WAN"                          | FT          | Educational |
| Narragansett:<br>Town Hall           | Video<br>Weekly Town Meetings          | PT          | Municipal   |
| Newport: Thompson Junior High School | Video<br>School Events                 | PT          | Educational |
| Rogers High School                   | Video<br>(Graduation 2/yr)             | PT          | Educational |
| N. Kingstown:<br>Town Hall           | Video<br>Weekly Town Meetings          | PT          | Municipal   |
| High School                          | Video (graduation, sports)             | PT          | Educational |
| Pawtucket:<br>City Hall              | Video<br>Town Meetings                 | PT          | Educational |
| Jenks Junior High School             | Video<br>Graduation                    | PT          | Educational |
| <b>Providence:</b> State House       | Video<br>Capitol Television            | FT          | State       |
| Smithfield:<br>Town Hall             | Video<br>Town Information,<br>Calendar | FT          | Municipal   |

| Town/<br>Facility                                | SERVICE USAGE                      | <u>USER</u> | PROGRAM                    |
|--|------------------------------------|-------------|----------------------------|
| S. Kingstown:<br>High School                     | Video<br>School Events Sports etc. | PT          | Educational                |
| Town Hall  | Video<br>Weekly Town Meetings      | PT          | Municipal                  |
| Keaney Gym<br>RI College                         | Video<br>Seasonal (Basketball)     | PT          | Educational, State,        |
| McGrath Judicial Center                          | Video<br>Town Meeting              | PT          | Municipal                  |
| Exeter / West Greenwich:<br>Middle / High School | Video<br>School Events             | FT          | Educational                |
| Westerly:<br>City Hall                           | Video<br>Town / School Meetings    | PT/PT       | Educational /<br>Municipal |
| Woonsocket:<br>Barry Field                       | Video (once p/yr)                  | PT          | Educational                |
| Police Dept.                                     | Video<br>River Island Park 4x/p/yr | PT          | Municipal                  |
| WW II Park                                       | Video<br>Single Event (Autumnfest) | PT          | Municipal                  |
| High School                                      | Video<br>School / Town Events      | FT          | Educational /<br>Municipal |
| Public Library                                   | Video<br>Town Events               | PT          | Municipal                  |

#### **EXHIBIT 11**

# ILLUSTRATIVE ELIGIBLE USER EQUIPMENT FOR VIDEO

# ORIGINATING LOCATION PLAYBACK DEVICE\*

| Equipment /Model |   | <u>Price</u> |
|------------------|---|--------------|
| 1.               | Camera (Analog)-JVC TK-C1380U<br>Distributor-polarisusa.com     | \$559.95     |
| 2.               | Microphone-Shure SM63 Distributor-shure.com                     | \$198.27     |
| 3.               | S-VHS VCR-Samsung SV5000W<br>Distributor-bestbuy.com            | \$399.99     |
| 4.               | DVD with Digital I/Os-Toshiba SD4700<br>Distributor-bestbuy.com | \$218.50     |

<sup>\*</sup>Items 1 and 2 are needed for live content origination and would be used with both a physically separate "B-Cable" and Cox's proposal. Either item 3 or item 4 is needed to originate pre-recorded content and would be used with both a physically separate "B-Cable" and Cox's proposal.

# MODULATION TRANSMISSION DEVICE\*\*

| Equipment/Model |   | <u>Price</u> |
|-----------------|---|--------------|
| 5.              | Modulator without Stereo and SAP<br>Blonder Tongue AM-60-860 5904<br>(7-550 MHz)<br>Distributor-blondertongue.com | 50.00        |
| 6.              | Bandstop Filter<br>RF Sub-Low band<br>Distributor-Microwave Filter Company  | **\$1,000.00 |
| 7.              | Bandpass Filter<br>RF band TBD  | **\$1,000.00 |

Distributor-Microwave Filter Company

Distributor-Cox-Motorola

- \*\* Items 5, 6 and 7 would be used with a physically separate "B-Cable" and with Cox's proposal.
- \*\*\* Items 6 and 7 are customized location specific filtering devices that the prices shown are to be noted as not to exceed prices.

#### **RECEIVING LOCATION\*\*\*\***

Equipment/Model

8. TV/MONITOR
Panasonic 27 inch TAU
Series 27SX12
Distributor-bestbuy.com

9. Set top box with remote
Motorola-Digital Consumer
Terminal ("DCT") with
Remote

Price

\$499.99

\$499.99

\$6.15/month

\*\*\*\* Item 8 would be used with both a physically separate "B-Cable" and Cox's proposal. Item 9 would be used with Cox's proposal.

#### NOTES:

- 1. Equipment costs are current as of June 2002. Equipment costs may vary by model and manufacturer over time.
- 2. Because Cox's proposal does not require Eligible Users to pay for CODECs, Cox has not included CODEC costs in this Exhibit.
- 3. Cox has not included in this Exhibit newer technology that might provide a substitute for a CODEC, such as a desktop PC with an all in one video card, since Cox's proposal does not require Eligible Users to pay for CODECs.
- 4. An Eligible User may purchase more costly equipment, but is not required to do so in order to make use of Cox's proposal.
- 5. Option I and Option II Data Services equipment requirements have not been included in this Exhibit. Eligible users are familiar with the costs of computer equipment and monitors.